BEDFORD COMMUNITY DEVELOPMENT PLAN

June 2004

Prepared by the Metropolitan
Area Planning Council
for
the Town of Bedford

Funded under Executive Order 418 by the Massachusetts Department of Housing and Community Development, Massachusetts Department of Economic Development, Executive Office of Transportation and Construction, and Executive Office of Environmental Affairs.

Credits and Acknowledgements

Bedford Board of Selectmen:
Mark Siegenthaler, Chair
Angelo Colao
Catherine Cordes
Gordon Feltman
Sheldon Moll

Bedford Planning Board:
Sandra L. Hackman, Chair
Arthur T. Smith, Clerk
Steven Spector
Robert M. Fagan
Lisa Ackerman

Bedford Housing Partnership:
Tiziana Dearing
Irma Carter
Eugene Clerkin
Maria Bililies
Robert Fagan
Stephen Hanna
Michelle Kahan
Alice Sun
Mary Kurkjian
Ronald Cordes
William Mello

Bedford Planning Director : Richard Joly

MAPC Officers:

President:	Richard A. Dimino
Vice President:	Gordon Feltman
Secretary:	Grace S. Shepard
Treasurer:	Jeanne E. Richardson
Executive Director:	Marc D. Draisen

MAPC Staff:

Project Manager:	Mark Racicot
Lead Project Planner:	Mark Hunsberger
Mapping:	Allan Bishop
	Kevin Sears
	Kate Rosson

MAPC
Metropolitan Area Planning Council
60 Temple Place
Boston MA 02111

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INTRODUCTION

Project Overview

In 2003, the Town of Bedford was granted $30,000 in planning services to complete a Community Development Plan (CDP), pursuant to Executive Order 418. Executive Order 418 enabled communities to prepare for future growth and development by creating visions, goals, and strategies in four areas: natural resources and open space, housing, economic development, and transportation. Four state agencies provided funding for this program: the Executive Office of Environmental Affairs, Department of Housing and Community Development, Executive Office of Transportation and Construction, and the Department of Economic Development.

The EO 418 program allowed communities to re-allocate funds from individual plan elements for which they had already prepared plans that met the intent of the program. For Bedford, the state's Interagency Work Group accepted the Town's existing plans for many of the Community Development Plan requirements:

Visioning and Goal Setting	Equivalency Granted
Open Space & Resource Protection	Equivalency Granted
Housing	Housing Opportunities Map Required
Economic Development	Updated Economic Profile Required
Transportation	Equivalency Granted, with funding approved to study worker commuting to Bedford
Putting it All Together	Community Development Plan Map Required

The Town used funds freed up from the elements granted equivalency status to perform additional planning for alternative transportation for workers commuting to Bedford. This work was performed by Transaction Associates and is detailed in the Appendix *Transportation and Economic Development Element.*

This Bedford Community Development Plan document was produced by the Metropolitan Area Planning Council (MAPC), and provides all of the other supplemental data, analysis, and maps corresponding to the requirements of EO 418 as outlined above. The report is organized around: Open Space, Housing, Economic Development, and Putting it All Together (including a brief summary of the Transportation and Economic Development element).

The full details and rationale for the remainder of Bedford's plans for future development can be found in the Town's Comprehensive Plan (December, 2002) and Comprehensive Affordable Housing Plan (January, 2002).

NATURAL RESOURCES AND OPEN SPACE

Bedford's 2002 Comprehensive Plan was granted equivalency for the Natural Resource and Open Space element. For the purposes of EO 418, MAPC was contracted to map sites identified by the Town as potential open space acquisitions. Two such sites were designated in the Comprehensive Plan, which appear on the Community Development Plan (Map 2). The parcels and rationale for the Town's interest in them are described in the Comprehensive Plan as follows:

> "The Town is interested in acquiring large parcels of land for multiple uses, including a site for a possible new school, affordable housing, playing fields, and conservation. The two obstacles the Town faces is that few parcels that can accommodate these uses – meeting requirements for size, topography, soils, and location – are available for purchase in Bedford and even if they were, all land in Bedford is very expensive.
>
> Two possibilities are the Eisenhauer and Harvard properties.
>
> The 54-acre Eisenhauer property is in the southeastern sector of town, close to Hanscom Field, between the flight paths for the two runways. It is adjacent to the Town Forest, and thus would provide added value as a recreation resource for the Town.
>
> The Harvard University Property consists of four parcels in the assessor's records…..The property abuts the Great Meadows National Wildlife Refuge and would have direct access to the proposed trail along the Concord River…as well as to existing trails on Huckins Farm property."[1]

[1] Bedford Comprehensive Plan, December 2002, Kenneth Kreutziger and Hastings-Murphy Associates, p. 6-7.

HOUSING

The Inter-Agency Work Group found the housing component of the Town of Bedford Comprehensive Plan and the Comprehensive Affordable Housing Plan to satisfy the Housing Element of the Community Development Plan, with the exception of the lack of a Housing Opportunities Map. MAPC was contracted to assist the Town in developing this map and including the Town's six top-priority affordable housing sites in the Final Community Development Plan map.

Bedford's 2002 Comprehensive Affordable Housing Plan[2] identified the following housing objectives:

- To meet local housing needs along the full range of incomes, promoting diversity and the stability of individuals and families living in Bedford.
- To leverage other public and private resources to the greatest extent possible.
- To insure that new housing creation is harmonious with the existing community.
- To surpass the 10% State standard for affordable housing.

The plan referenced an extensive site selection process conducted by the Bedford Housing Trust to identify sites for affordable housing, narrowing a list of over 400 parcels to about 80 properties of sufficient size and free of physical constraints. At the time the plan was written in January 2002, six Priority One sites were recommended based on several criteria:

- Ownership by the Town
- Proximity to transportation
- Proximity to services.

Town-owned parcels were favored because Bedford's high land prices make development of affordable housing difficult without a land purchase subsidy or gift. Sites near existing transportation and service corridors were intended to reduce the traffic and infrastructure costs associated with new development.

The six Priority One sites are described in Figure 1 and located on the Housing Opportunities Map (Map 1). It should be noted that as of early 2004, plans are underway to enhance Site 6 for continued use as a playground..

[2] Comprehensive Affordable Housing Plan, Town of Bedford. January 2002, Karen Sunnarborg, Consultant.

Figure 1
Priority One Housing Sites from 2002 Comprehensive Affordable Housing Plan

Site	Size (Sq. Feet)	Abutters	Features	Potential Use
#1 447 Concord Road	191,464	Single family residences; 258 unit apartment complex proposed within ½ mile	Abuts bike path at rear of site; wetland area will be preserved 1b	10 rental units affordable to a range from 30% 100% of median income
#2 70 Pine Hill Road	717,742	Single family residential	Town-initiated development restriction expires in 2015; some wetlands on site	Possible mix of affordable housing and open space preservation
#3 190 Springs Road	355,014	VA Hospital and 15 Pine Hill Road (Site #4) abut; DPW storage garages are on-site	Wetlands, unbuildable knoll, deed restriction requires recreation use	15 rental units with at least 25% affordable
#4 15 Pine Hill Road	145,926	Single family residences and Town-owned 190 Springs Road (site #3)	Stone Dust Rail Trail is adjacent; wetland area may restrict use	15 ownership units affordable to first time buyers
#5 131 Shawsheen Road	2,785,226	Town cemetery, Single family residences, multifamily residences	Majority of site can be used for cemetery expansion and watershed protection	20 units of rental housing affordable to those earning 60% of median income
#6 34A Fayette Road	30,517	Single family residences	Being enhanced for continued playground use as of March, 2004	4 ownership units for first time buyers

Source: Bedford Housing Partnership & *Bedford Comprehensive Affordable Housing Plan*

ECONOMIC DEVELOPMENT

Key findings

- While the number of jobs in Bedford is down from its 1980s peak, the Town provides many more jobs than it has workers and draws commuters from many communities. Yet, three out of four residents themselves commute outside the community.

- Businesses in manufacturing and professional and technical services provide over 40% of the jobs in Bedford and contribute to the town's relatively high average wage.

- Bedford offers many opportunities for employment for middle income workers in its large manufacturing and professional services sectors, and for low and moderate income workers in retail, hospitality, and health care.

- The Federal government has a significant presence through the VA Hospital and Hanscom Air Force Base, which represent key areas of focus for job retention.

Economic Profile

Overview

The Town of Bedford is a prosperous suburban community with a substantial local economy based in high paying jobs in engineering, electronics, and information technology. Its workforce is growing slowly, and is increasingly well educated and well paid. Three of four working residents commute to jobs elsewhere in the region.

Despite having a population of only 12,600 in 2000, the Town is home to over 20,000 jobs and has the highest ratio of jobs to resident workers in the region. The dominant manufacturing job base declined dramatically from the mid-1980s to mid-1990s, and despite some recovery, total jobs remain 10-20% below late-80s levels. At the same time, the number of employers has increased by half, and the real, inflation-adjusted average wage has climbed by 30% following sharp increases in the late 1990s.

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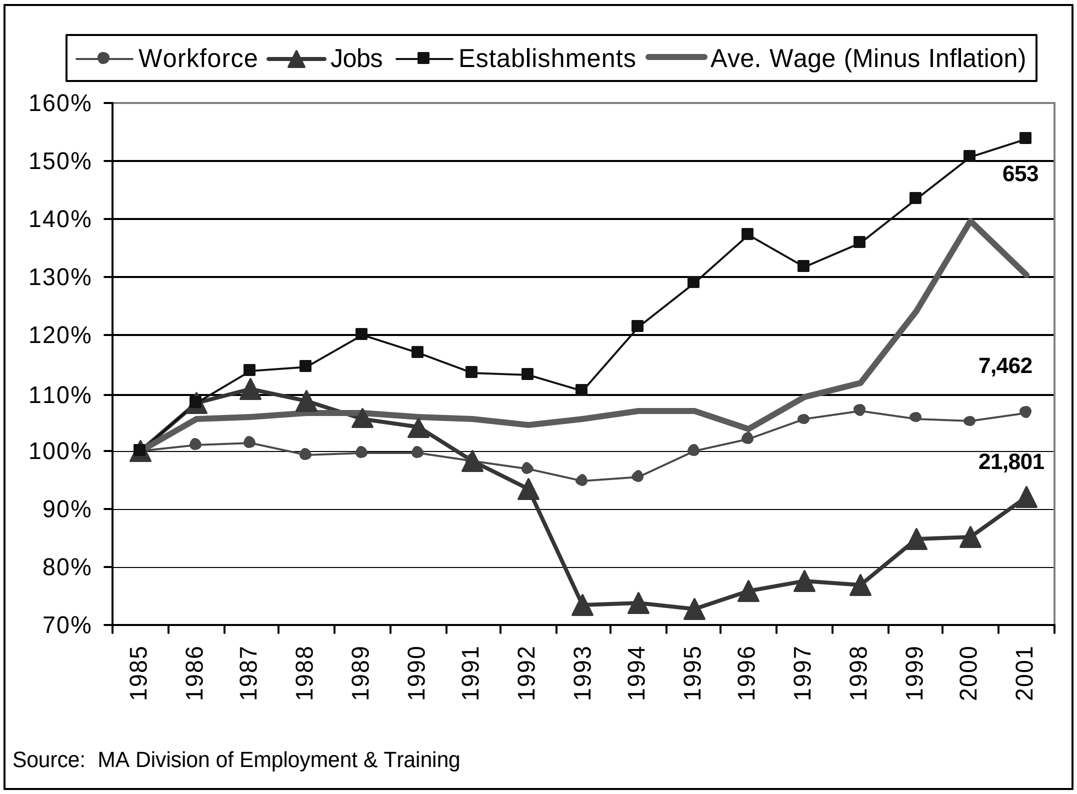
Figure 2.
Growth in Bedford's Resident Workforce, Jobs, Establishments and Real Wages, 1985=100%.



Resident Workforce

Bedford's workforce has grown slowly over the last decade, increasing by about 500 resident workers (7%) since 1990 to 7,462 in 2001. Because total local employment decreased over the period, the ratio of jobs to workers decreased from 3.54 to 2.92. Even with this decline, Bedford boasts the highest ratio of employment to workforce in the 101-community MAPC region, for which the median ratio in 2001 was 0.76.
Most Bedford residents commute to jobs in other communities in the region. In 2000, 26.5% of working residents were employed in Bedford, filling 8-10% of local jobs. About 3% (313) of workers worked from home.

While Bedford's mix of jobs is among the highest paying in the region, many Bedford workers have found equally lucrative opportunities in other communities. The Town's median income increased over 50% from 1989 to 1999 to almost $88,000 which is nearly 60% above the metropolitan median of $55,234. Bedford's income distribution has higher proportions of households than Greater Boston in all income categories over $75,000, and only 5% of households fall under $15,000. The number of individuals below the poverty line increased by 47% in the 90s, but totals only 2.4% of the population (300).

One reason for the rising incomes is the increasing number of residents who identify themselves as being in Managerial or Professional occupations (+42%). At 64% of the workforce, the proportion of Bedford workers in these occupations exceeds the regional average by 17 percentage points.

Figure 3.
Bedford Resident Workforce and Job Base.

	Workforce	Jobs	Job : Worker Ratio
1985	6,989	23,706	3.39
1986	7,056	25,733	3.65
1987	7,081	26,268	3.71
1988	6,927	25,832	3.73
1989	6,953	25,033	3.60
1990	6,954	24,620	3.54
1991	6,864	23,269	3.39
1992	6,758	22,112	3.27
1993	6,625	17,445	2.63
1994	6,662	17,528	2.63
1995	6,993	17,273	2.47
1996	7,131	17,994	2.52
1997	7,362	18,403	2.50
1998	7,476	18,233	2.44
1999	7,399	20,089	2.72
2000	7,352	20,170	2.74
2001	7,462	21,801	2.92
Growth 1990-2001			
	508	(2,819)	(0.62)
	7%	*(11%)*	*(17%)*

Source: MA Division of Employment & Training.

Figure 4.
Household Income Distribution in Bedford and the Region, 2000.

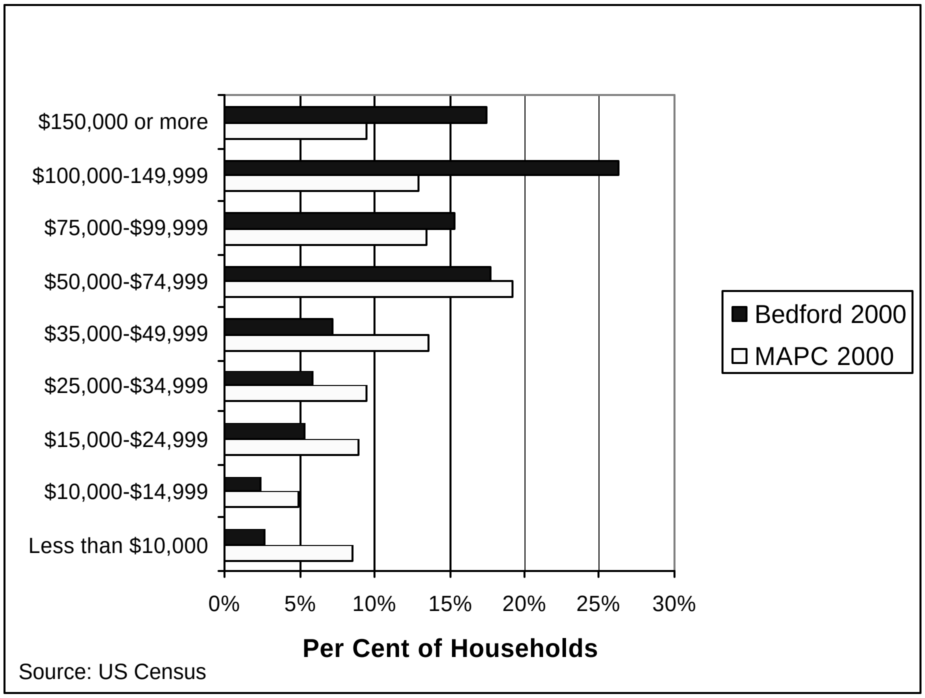
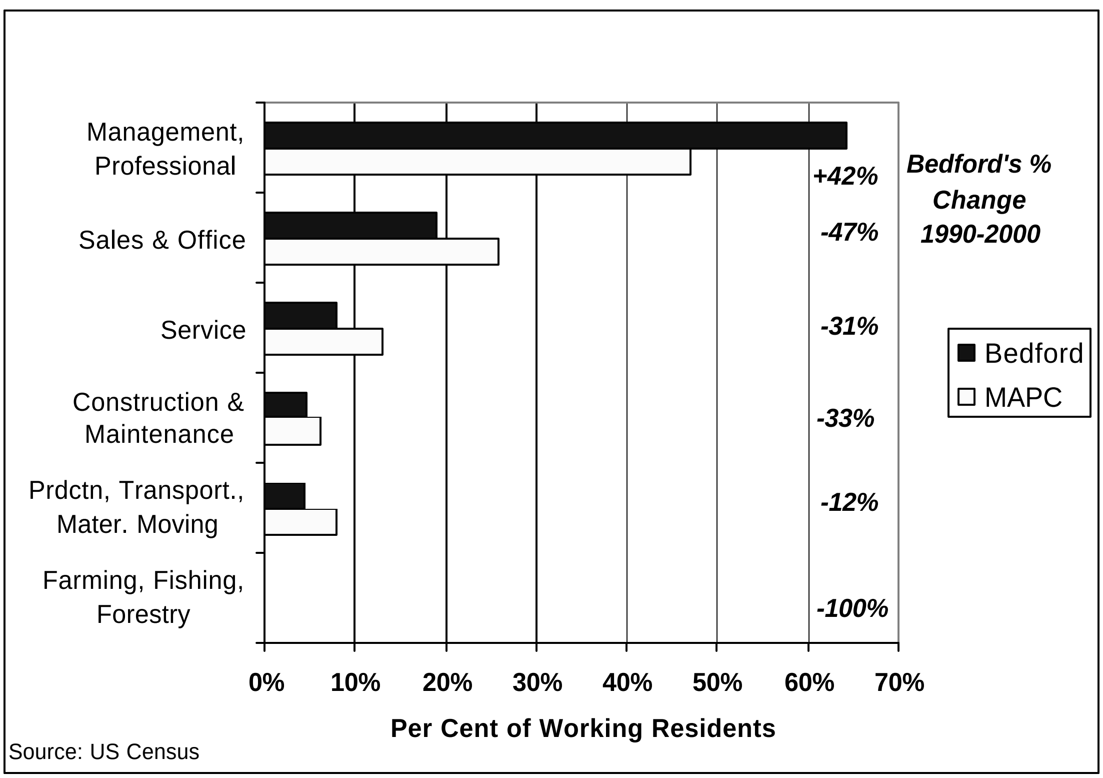
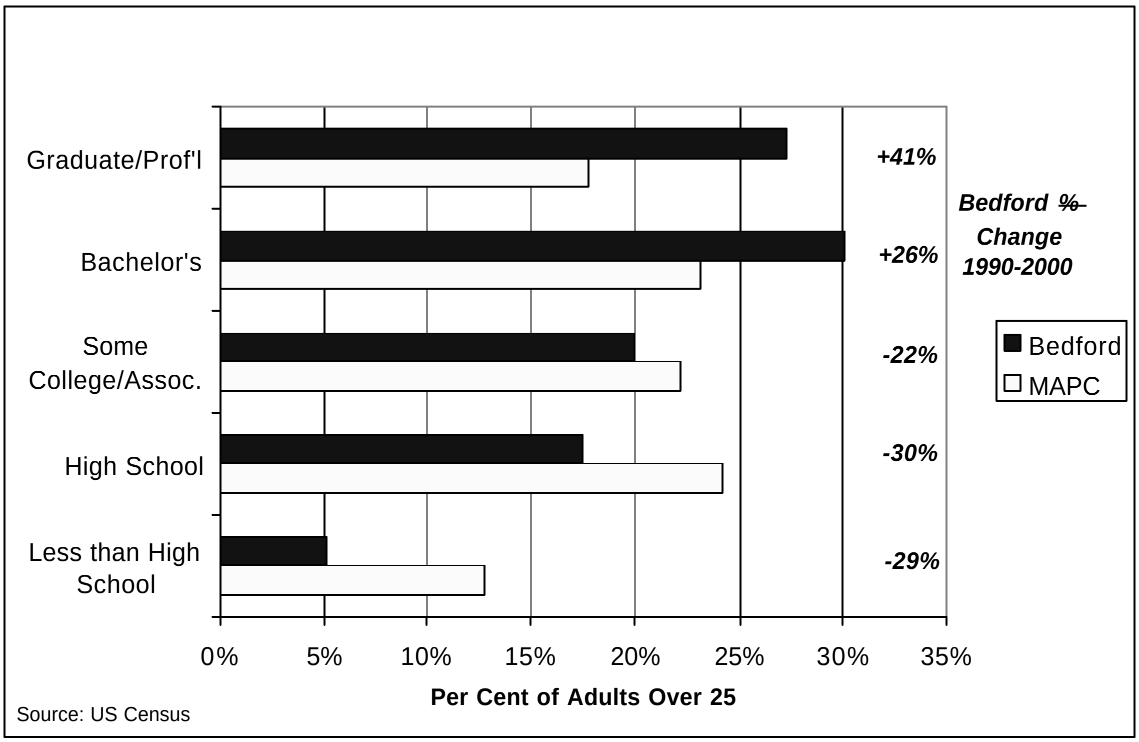


Figure 5.
Occupations of Bedford and Greater Boston Residents, 2000.



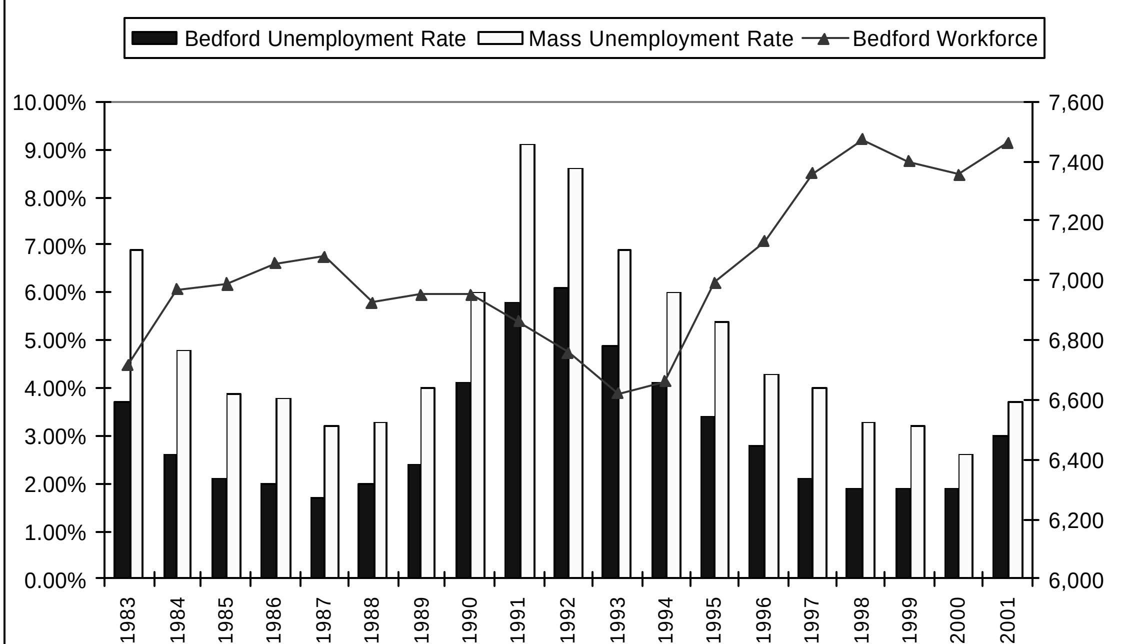
Another indicator of the high quality of the Bedford workforce is educational attainment. From 1990-2000, the number of Bedford adults having a college degree increased by one-third, despite an overall population decline of 3%. The proportion of adults with graduate degrees is thus 9 percentage points higher than the region at 27% and for bachelor's degrees 7 points higher at 30%. Likewise, the number of adults not having achieved at least a high school degree declined by 29% and represents less than half the regional average.

Figure 6.
Highest Degrees Attained by Adults in Bedford and Greater Boston, 2000.



Residents' high education levels and occupational profile have made them relatively less vulnerable to economic downturns. The local annual unemployment rate has bested the statewide rate consistently by at least half a point since 1983.

Figure 7.
Bedford Unemployment Rate and Number of Residents in the Workforce.



Source: MA Division of Employment & Training

Job Base

Bedford is a significant regional job center, hosting slightly over 20,000 jobs in 2002. The Town's total number of jobs is down 6,000 from the peak in 1987, with subsequent growth in Services, Finance/Insurance/Real Estate (FIRE), and Transportation/Communications/Utilities (TCPU) sectors not yet having compensated for substantial declines in Manufacturing and Government employment in the late 1980s and 1990s. While the latest annual Manufacturing job total is only half its 1987 peak, it has recovered 2,600 jobs from its low point in 1995. Still, Services now account for over one third of jobs, Manufacturing 28% and Government 20%, including 3,275 Federal employees affiliated with the Veterans Administration Hospital, Hanscom Air Force Base, and adjacent facilities.

Figure 8.
Bedford Jobs by Sector.

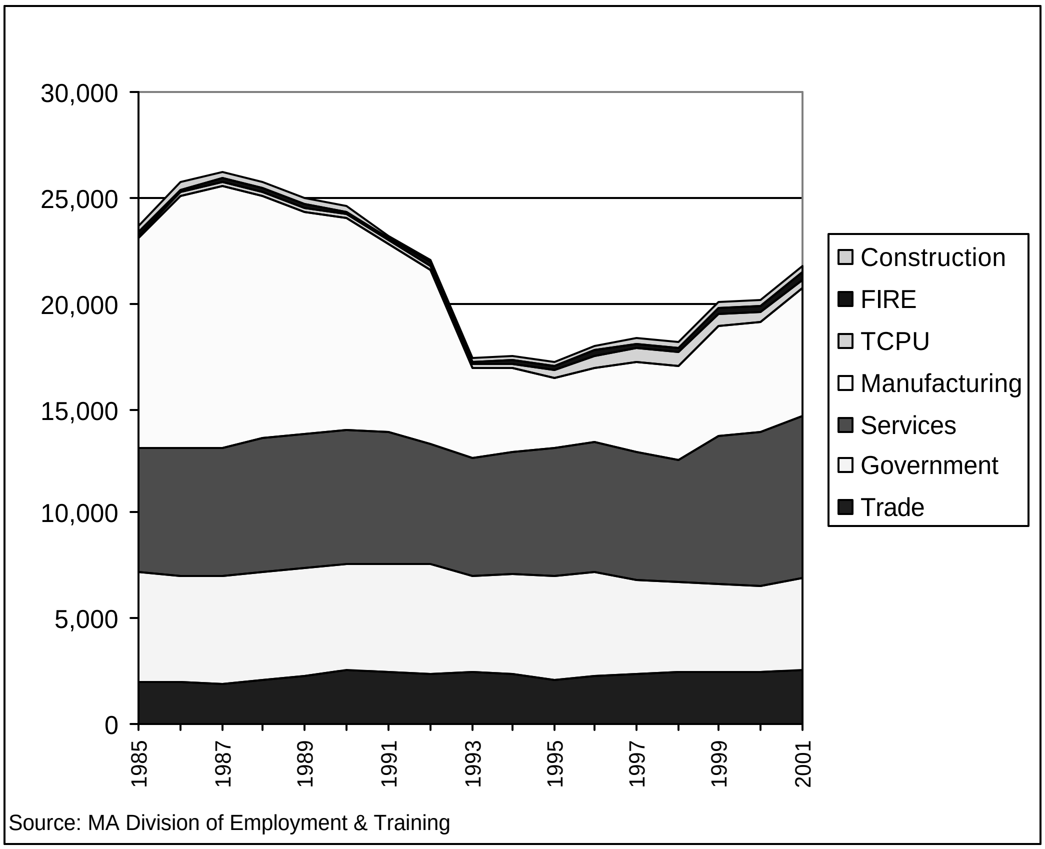
Year	Number of Establishments	Total Jobs	Services	Manufacturing	Government	Trade	Finance, Insurance, Real Estate	Transportation, Communications, Utilities	Construction	Agriculture, Fishing, Forestry
1985	425	23,706	5,815	10,035	5,233	1,998	134	150	309	31
1986	461	25,733	6,038	11,989	5,083	1,946	150	184	312	33
1987	485	26,268	6,087	12,445	5,115	1,883	158	220	316	44
1988	488	25,832	6,483	11,445	5,050	2,121	179	193	316	43
1989	510	25,033	6,471	10,526	5,041	2,312	181	151	301	50
1990	498	24,620	6,442	10,050	4,967	2,561	170	167	222	41
1991	483	23,269	6,350	8,934	5,043	2,487	149	142	125	39
1992	481	22,112	5,647	8,411	5,178	2,377	131	187	141	40
1993	470	17,445	5,511	4,399	4,578	2,465	136	160	157	39
1994	517	17,528	5,701	4,092	4,766	2,377	152	218	186	36
1995	548	17,273	6,075	3,414	4,922	2,042	164	408	197	51
1996	583	17,994	6,247	3,529	4,868	2,314	200	594	209	33
1997	561	18,403	6,058	4,428	4,393	2,374	191	663	264	32
1998	578	18,233	5,737	4,553	4,250	2,478	190	672	324	29
1999	610	20,089	7,068	5,206	4,203	2,427	262	634	261	28
2000	641	20,170	7,347	5,179	4,122	2,454	268	524	244	32
2001	**653**	**21,801**	**7,717**	**6,074**	**4,325**	**2,596**	**410**	**387**	**258**	**34**
2002	659	20,250								
% of 2001 Jobs			*35%*	*28%*	*20%*	*12%*	*2%*	*2%*	*1%*	*0%*
Growth 1990-2001										
	155	(2,819)	1,275	(3,976)	(642)	35	240	220	36	(7)
	31%	*(11%)*	*20%*	*(40%)*	*(13%)*	*1%*	*141%*	*132%*	*16%*	*(17%)*

Source: MA Division of Employment & Training.

Wholesale/Retail trade is the fourth largest source of employment, but growth has been essentially flat since 1990. FIRE and TCPU have grown rapidly in percentage terms, but from such small bases that together they still represent only 5% of local jobs.

At the same time overall employment has fallen, the number of establishments has continued to increase, leading to a decline in the average size of establishment from nearly 50 in 1990 to 33 in 2001.

Figure 9.
Number of Jobs in Bedford by Sector, 1985-2001.



Bedford jobs are concentrated in Manufacturing and Professional & Technical Services which together comprise almost half of all jobs in Town. Both of these industries are oriented toward technology. Almost two-thirds of Manufacturing jobs are involved in production of Computer and Electronic Products. And in Professional & Technical Services, over half of the jobs are in Architectural and Engineering businesses and another third in Computer Systems Design and Services. The focus on these industries reflects the long history of military electronics research and production clustered near Hanscom Field and MITRE, as well as the more recent concentration of information technology businesses along the Route 3 and 128/95 corridors.

The high average wages in these industries contribute to Bedford having one of the best paying mixes of jobs in the region. The 2002 private sector average wage of $66,300 exceeded the regional average of $50,750 by fully 31%. Wages grew at a very rapid compound rate of 3.3% per year after inflation from 1995-2001, compared to only 0.3% in the recessionary period of 1990-95.

Bedford's concentration of technically-oriented businesses offer high wages, but many of their positions require specialized skills, education, and training that draw workers from the regional supply of technical talent rather than more broadly from the general population. And, while the Town's focus on these industries yields high wages, it also makes the community potentially vulnerable to declines in these sectors.

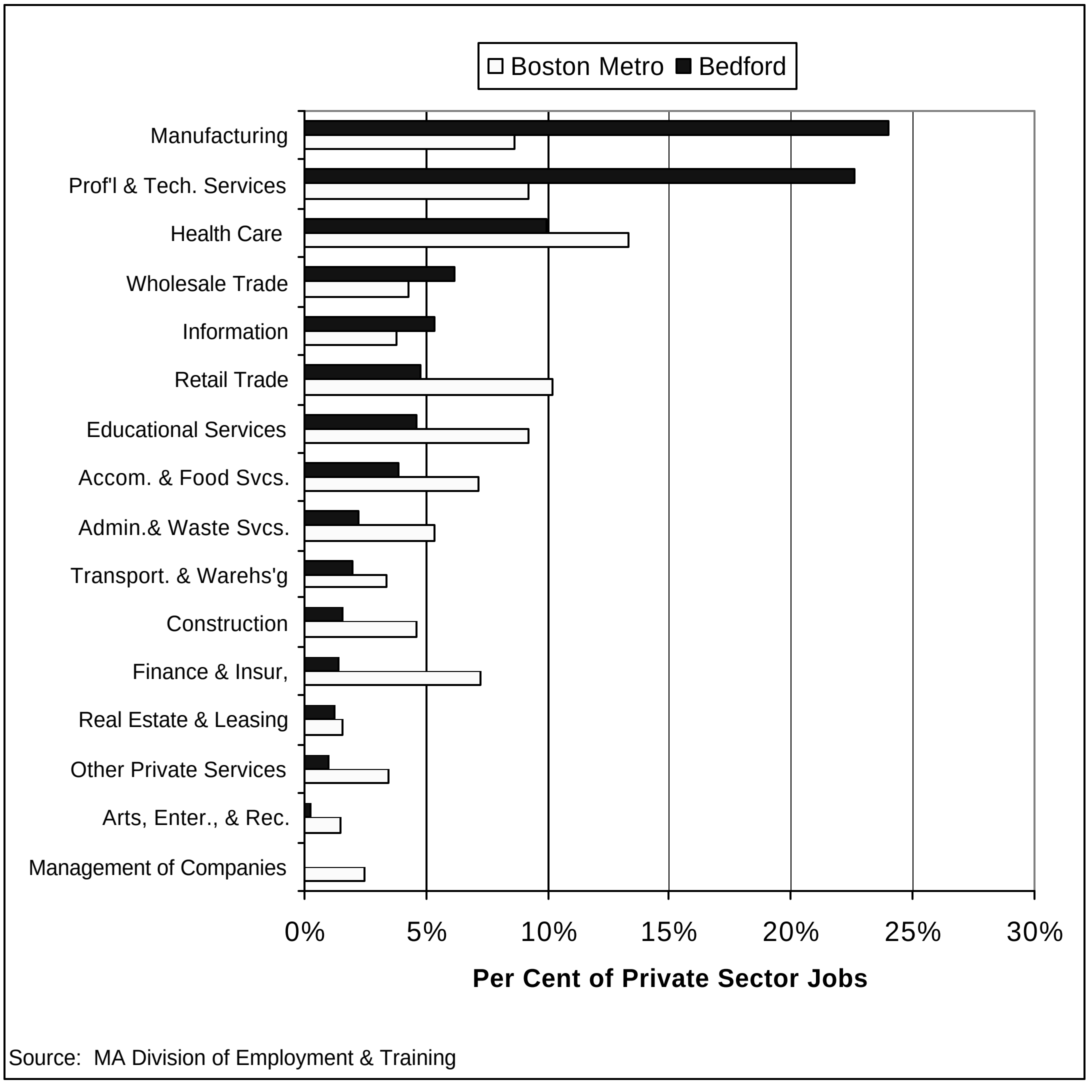
Figure 10.
Employment and Wage by Industry, 2002.
(Does not include ~10% of jobs in suppressed for confidentiality)

	Number of Employees	Average Annualized Wage
Manufacturing	4,871	$74,360
Professional & Tech. Services	4,577	$83,148
Health Care	2,003	$46,904
Wholesale Trade	1,239	$69,160
Information	1,080	$88,400
Retail Trade	971	$26,364
Educational Services	930	$42,120
Accommodation & Food Svcs.	778	$19,708
Admin.& Waste Services	454	$27,612
Transport. & Warehousing	404	$40,560
Construction	314	$49,868
Finance & Insurance	289	$57,616
Real Estate & Leasing	256	$46,696
Other Private Services	196	$33,488
Arts, Enter., & Rec.	53	$27,560

Source: MA Division of Employment & Training

Relative to the Boston region as a whole, Bedford's concentration of jobs in Manufacturing and Professional/Technical services means that the Town is "underweighted" in almost other industries. Still, local employers in Health Care (e.g., VA Hospital), Retail (food, clothing stores), Education (primary, secondary schools), Restaurants, and Building Services provide hundreds of jobs for those with low and moderate incomes. A more detailed breakdown of local employment by industry is provided in the Appendix.

Figure 11.
Distribution of Jobs by Industry for Bedford and Metro Boston, 2002.



Property Tax Base

The share of total property valuation contributed by Bedford's Commercial, Industrial, and Personal property (CIP) declined from 42% in 1990 to 25% in FY2003. Because Bedford taxes business property at a higher rate than residential, the CIP share of taxes levied was higher, but still fell from 58% to 44%. One cause of this decline is the deteriorating value of industrial property reflecting the loss of manufacturing jobs since the 1980s. Industrial values declined substantially in the recession of the early 1990s and have failed to recover.

An even larger contributor to the increasing reliance on the residential property base is the tremendous appreciation of single family home values, particularly in sharp spurts in the 1980s and late 1990s. Soaring residential values are common throughout Eastern

Massachusetts communities, reflecting a shortfall of housing construction over recent decades that has driven up prices across the region.

Figure 12.
Bedford property valuations, Fiscal Years 1985-2003.

	CIP %	Residential	Commercial	Industrial	Total
1985	50.2%	$319 M	$122 M	$192 M	$650 M
1990	41.7%	$839 M	$263 M	$330 M	$1,469 M
1995	32.8%	$799 M	$167 M	$199 M	$1,201 M
2000	28.5%	$1,189 M	$217 M	$220 M	$1,672 M
2003	25.1%	$1,687 M	$322 M	$195 M	$2,263 M
Change over Period					
1985-1990	(8.5) pts	$520 M	$142 M	$138 M	$819 M
1990-1995	(8.9) pts	$(40) M	$(96) M	$(131) M	$(268) M
1995-2000	(4.2) pts	$390 M	$50 M	$21 M	$471 M
2000-2003	(3.5) pts	$498 M	$105 M	$(25) M	$591 M

Source: MA Department of Revenue.

Today, Bedford's CIP valuation share is substantially below neighboring Burlington, which has one of the higher CIP shares in the region. However, the Town's reliance on residential property remains less than the statewide average and much less than neighboring Carlisle and Lincoln, which have very little non-residential development and very high residential values. Bedford's average single family tax bill consequently falls between these extremes at $4,582 which is 80% above the statewide median, but at 45th highest in the state is roughly in line with the relative average value of residential property (38th highest at $425,429).

Economic Opportunities

The mix of jobs in Bedford is heavily weighted toward manufacturing and professional & technical services businesses, which account for over 40% of private sector jobs. Businesses in architecture & engineering and in computer systems design & services businesses dominate the professional & technical services category, providing almost 4,000 well paying jobs ($80,000+ annual average) for moderate and middle income workers. Manufacturing provides another 4,900 jobs which pay an average salary of $74,000.

These types of businesses have been hit relatively hard region-wide by the current recession, and office and industrial vacancy rates have climbed to 20-30% in the Route 128 corridor as a result. The survey of employers conducted for the Transportation element found few companies willing to admit to plans for expanding during a relatively low point in the business cycle. Yet, in the longer term Bedford's proximity to major highways and to the defense research facilities at Hanscom Field should enable local employment to recover with the overall economy.

As was identified in the Town's 2002 Comprehensive plan, the town's primary sources of employment for low and lower-moderate income workers are local retailers and the Veteran's Administration Hospital. Both retail and health care services traditionally offer numerous part-time and entry level positions suitable for low-moderate income workers. The Town's plan to facilitate controlled expansion of the retail sector in business parks and various other areas is appropriate to retaining and creating jobs in this sector. Encouragement of tourism would likewise add to local retail demand and reinforce the town's restaurants and lodging accommodations. Another potential opportunity for low-moderate workers is in providing business services to serve local offices and manufacturing plants. Such services could range from copying/printing services to building maintenance.

Two Federal facilities have major influence in Bedford's employment picture. The approximately 1,400 jobs at the VA Hospital represent a major asset in an industry that traditionally provides opportunities and career paths for entry level and low-moderate income workers. Likewise, the 2,500 jobs at the Hanscom Air Force Base represent not only one of the largest single sources of employment in the area, but the military's research activities are also widely cited as essential to the success of other nearby research facilities such as MITRE as well as numerous companies in military electronics and systems. Continuation of the research facilities at Hanscom is a particular concern to Bedford and the region in light of ongoing efforts to reduce the number of military facilities nationwide. In both cases, the Town would be well served to pay continued attention to ensuring that town actions do not inhibit the competitiveness of these facilities relative to others, and that their importance to the local economy is well communicated in the analyses and discussions conducted regarding their long-term status.

Finally, the recommendations in the accompanying Transportation and Economic Development element to establish a Transportation Management Association and pursue transit service in the Route 3 corridor should improve access to Bedford employers, particularly for the estimated 30% of employees commuting from the north. Such measures will help make the Town a more attractive location for employers who draw workers from throughout the region, as well as lower commuting costs for employees, enhancing the retention and creation of jobs. Completion of the expansion of Route 3 is projected to reduce traffic congestion and ease access to employers, particularly in the eastern section of town. The majority of the vacant and redevelopable commercial and industrial land identified by the town as suitable for business expansion is located in this area between Route 3 and the Middlesex Turnpike.

PUTTING IT ALL TOGETHER

The details and rationale for Bedford's plans for future development are contained in the Town's Comprehensive Plan completed in December, 2002 and the Comprehensive Affordable Housing Plan of January, 2002. The work conducted under Executive 418 focused narrowly on a few tasks: updating the town's economic profile, recommendations on employee commuting patterns, and mapping potential sites for open space acquisition and affordable housing identified in the Town's existing plans.

Community Development Plan Map

The Community Development Plan Map (Map 2) shows those components of Bedford's open space and housing plans that impact land use. Characteristics and potential future uses for these areas are summarized below and on the map. It should be noted that the underlying land use for the two potential open space acquisitions was not changed on the map because the precise nature of their future use is undefined; these sites are of interest to the town precisely because they represent opportunities for multiple uses. Similarly, the land use coding was not changed for potential housing sites #3, 4, and 5 because the sites may well involve uses in addition to housing, such as open space and cemetery expansion.

Figure 13.
Land Use Changes on Community Development Map.

Site	Potential Use
Housing Site #1 447 Concord Road	• 10 rental units affordable to a range from 30% 100% of median income -
Housing Site #2 70 Pine Hill Road	• Possible mix of affordable housing and open space preservation
Housing Site #3 190 Springs Road	• 15 rental units with at least 25% affordable
Housing Site #4 15 Pine Hill Road	• 15 ownership units affordable to first time buyers
Housing Site #5 131 Shawsheen Road	• 20 units of rental housing affordable to those earning 60% of median income
Housing Site #6 34A Fayette Road	• 4 ownership units for first time buyers
Harvard Property	• Playing fields, conservation, housing, or school
Eisenhauer Property	• Playing fields, conservation, housing, or school

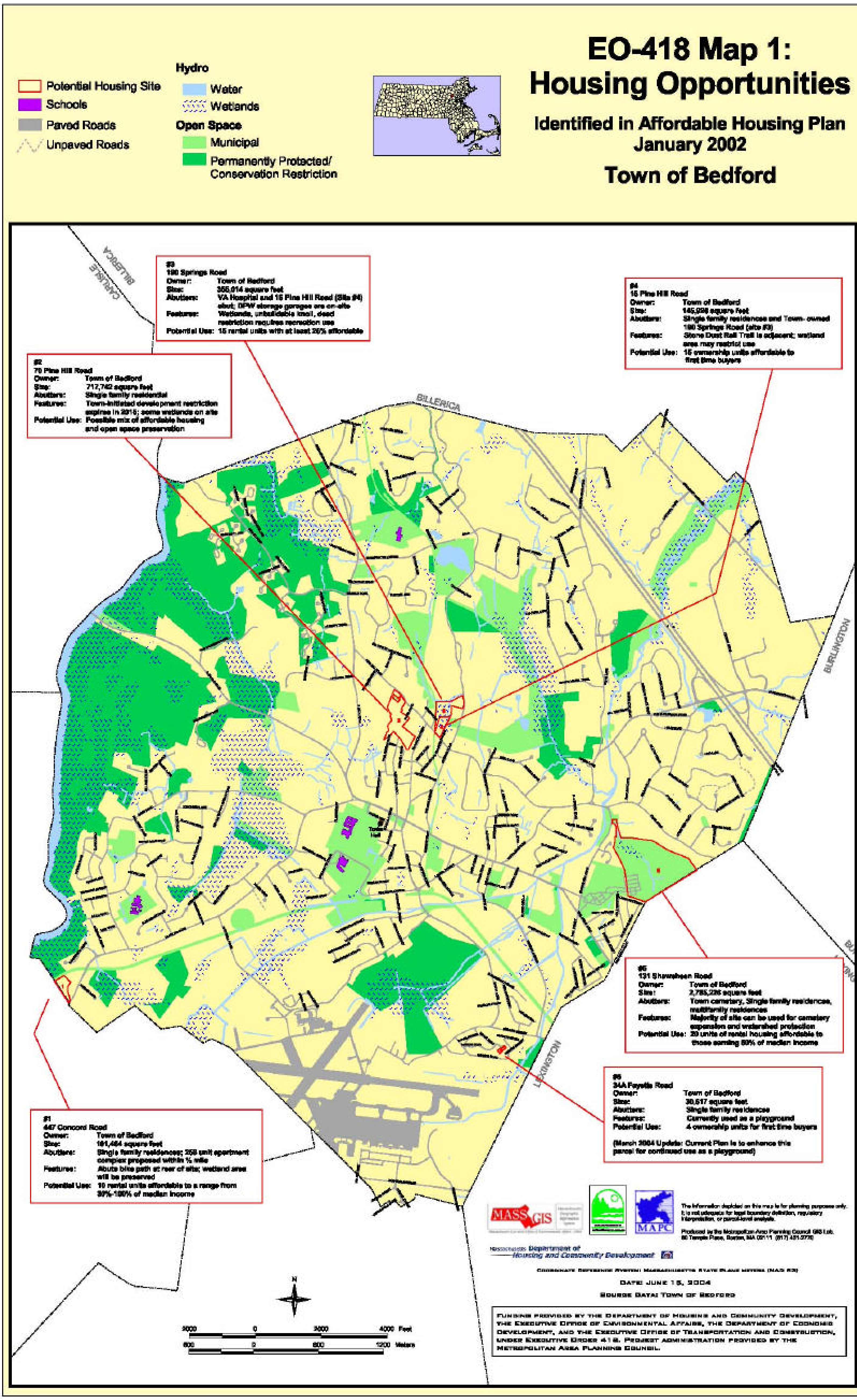
Not shown on the map are the recommendations of the Transportation and Economic Development element, which was completed by Transaction Associates to identify alternatives for employee commuting to Bedford. The principal recommendations of this analysis are:

- Creating a public-private Transportation Management Association to develop programs for reducing the number of single occupancy vehicle trips by commuters to Bedford

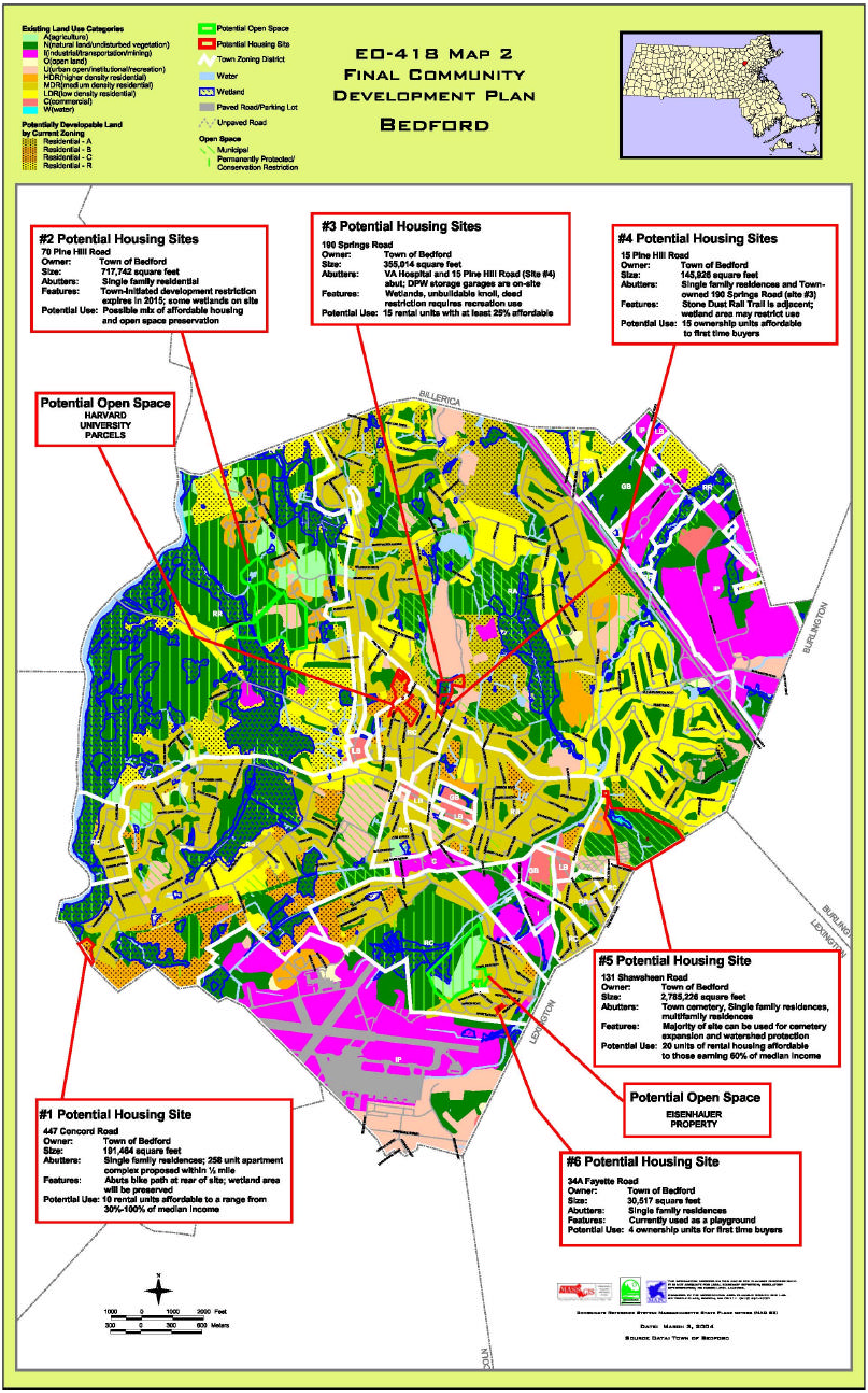
- Establishing express transit service to Bedford employers for commuters in the Route 3 north corridor (subject to funding)

The full findings and recommendations for employee commuting can be found in the *Transportation and Economic Development Element* in the Appendix.

Map 1. Housing Opportunities



Map 2. Community Development Plan



APPENDIX

Private Sector Employment in Bedford by Industry
(Source: MA Division of Employment and Training)

NAICS	Description	Num. of Estab.	Ave. Monthly Employees	Average Annual Wages	Total Wages
	Total, all industries	626	15,931	$66,300	$1,056,370,457
	Goods-Producing Domain	86	5,149	$72,956	$375,744,232
	Construction	49	275	$48,828	$13,413,214
23	Construction	49	275	$48,828	$13,413,214
236	Construction of Buildings	21	92	$57,772	$5,328,637
2361	Residential Building Construction	17	43	$46,332	$2,003,723
238	Specialty Trade Contractors	26	173	$43,992	$7,627,340
2381	Building Foundation/Exterior Contractors	4	15	$32,500	$495,362
2382	Building Equipment Contractors	11	116	$47,944	$5,552,202
2383	Building Finishing Contractors	8	25	$37,336	$945,953
	Manufacturing	36	4,871	$74,360	$362,280,846
31-33	Manufacturing	36	4,871	$74,360	$362,280,846
	Durable Goods Manufacturing	27	4,360	$75,972	$331,134,014
	Non-Durable Goods Manufacturing	9	511	$60,944	$31,146,832
325	Chemical Manufacturing	5	348	$60,060	$20,895,331
334	Computer & Electronic Product Mfg	21	3,116	$71,812	$223,797,273
3344	Semiconductor and Electronic Components	5	114	$104,260	$11,866,341
3345	Electronic Instrument Manufacturing	9	1,740	$67,444	$117,383,371
	Service-Providing Domain	540	10,782	$63,128	$680,626,225
	Trade, Transportation and Utilities	124	2,417	$49,088	$118,608,657
42	Wholesale Trade	61	1,239	$69,160	$85,636,717
423	Merchant Wholesalers, Durable Goods	26	771	$67,236	$51,846,432
4234	Commercial Goods Merchant Wholesalers	14	582	$66,404	$38,654,920
4236	Electric Goods Merchant Wholesalers	5	50	$86,372	$4,297,713
4238	Machinery & Supply Merchant Wholesalers	3	29	$87,984	$2,529,634
425	Electronic Markets and Agents/Brokers	30	107	$64,792	$6,906,336
4251	Electronic Markets and Agents/Brokers	30	107	$64,792	$6,906,336
44-45	Retail Trade	49	899	$25,740	$23,158,849
441	Motor Vehicle and Parts Dealers	3	89	$56,472	$5,025,851
4411	Automobile Dealers	3	89	$56,472	$5,025,851
443	Electronics and Appliance Stores	4	31	$29,016	$906,456
4431	Electronics and Appliance Stores	4	31	$29,016	$906,456
444	Building Material & Garden Supply Stores	4	71	$26,260	$1,866,740
4441	Building Material and Supplies Dealers	3	43	$29,588	$1,276,130
445	Food and Beverage Stores	7	362	$23,608	$8,558,862
4451	Grocery Stores	3	343	$23,920	$8,211,966

NAICS	Description	Num. of Estab.	Ave. Monthly Employees	Average Annual Wages	Total Wages
4453	Beer, Wine, and Liquor Stores	3	18	$18,772	$335,196
446	Health and Personal Care Stores	6	66	$23,504	$1,541,994
4461	Health and Personal Care Stores	6	66	$23,504	$1,541,994
447	Gasoline Stations	4	15	$17,108	$260,794
4471	Gasoline Stations	4	15	$17,108	$260,794
448	Clothing and Clothing Accessories Stores	7	135	$16,640	$2,248,351
4481	Clothing Stores	4	127	$16,224	$2,054,792
451	Sporting Goods/Hobby/Book/Music Stores	4	39	$15,340	$601,621
4511	Sporting Goods/Musical Instrument Stores	3	33	$14,300	$466,516
453	Miscellaneous Store Retailers	9	56	$27,560	$1,539,064
4531	Florists	4	10	$19,708	$192,405
4532	Office Supply, Stationery & Gift Stores	4	45	$29,328	$1,322,659
48-49	Transportation and Warehousing	14	280	$35,100	$9,813,091
485	Transit and Ground Passenger Transport	4	95	$25,116	$2,390,785
488	Support Activities for Transportation	8	134	$43,420	$5,813,040
4881	Support Activities for Air Transport	7	130	$43,004	$5,584,063
	Information	28	1,029	$91,780	$94,478,640
51	Information	28	1,029	$91,780	$94,478,640
511	Publishing Industries	16	891	$93,392	$83,209,603
5112	Software Publishers	14	883	$93,808	$82,799,933
	Financial Activities	43	507	$55,172	$27,960,158
52	Finance and Insurance	30	289	$57,616	$16,648,377
522	Credit Intermediation & Related Activity	12	152	$42,588	$6,477,715
5221	Depository Credit Intermediation	11	140	$36,036	$5,036,064
523	Financial Investment & Related Activity	8	27	$124,956	$3,404,810
5242	Insurance Agencies, Brokerages & Support	8	19	$53,092	$1,021,740
53	Real Estate and Rental and Leasing	13	218	$51,948	$11,311,781
5312	Offices of Real Estate Agents & Brokers	5	6	$46,176	$254,101
5322	Consumer Goods Rental	3	16	$12,064	$197,266
	Professional and Business Services	206	5,055	$77,844	$393,547,898
54	Professional and Technical Services	157	4,577	$83,148	$380,657,446
541	Professional and Technical Services	157	4,577	$83,148	$380,657,446
5411	Legal Services	8	43	$51,324	$2,214,985
5412	Accounting and Bookkeeping Services	8	23	$44,252	$1,036,186
5413	Architectural & Engineering Services	26	2,519	$83,096	$209,272,446
5415	Computer Sys Design & Rel Services	46	1,497	$87,100	$130,322,926
5416	Mgmt & Technical Consulting Svc	43	193	$81,224	$15,653,190
5417	Scientific Research and Development Svc	17	262	$73,996	$19,407,555
5418	Advertising and Related Services	3	7	$50,388	$348,390
5419	Other Professional & Technical Services	4	32	$73,736	$2,322,368

NAICS	Description	Num. of Estab.	Ave. Monthly Employees	Average Annual Wages	Total Wages
56	Administrative and Waste Services	45	454	$27,612	$12,553,754
561	Administrative and Support Services	44	449	$26,728	$11,981,901
5611	Office Administrative Services	6	63	$25,896	$1,632,853
5613	Employment Services	4	101	$35,516	$3,601,756
5615	Travel Arrangement & Reservation Service	11	21	$33,540	$687,705
5616	Investigation and Security Services	3	7	$13,156	$87,813
5617	Services to Buildings and Dwellings	16	204	$18,044	$3,677,281
	Education and Health Services	51	896	$28,444	$25,480,153
61	Educational Services	6	139	$22,308	$3,092,026
611	Educational Services	6	139	$22,308	$3,092,026
6115	Technical and Trade Schools	3	88	$27,248	$2,408,994
62	Health Care and Social Assistance	45	757	$29,588	$22,388,127
621	Ambulatory Health Care Services	25	290	$34,580	$10,025,341
6211	Offices of Physicians	9	67	$42,536	$2,830,595
6212	Offices of Dentists	8	39	$35,776	$1,400,594
6213	Offices of Other Health Practitioners	4	12	$20,384	$239,223
6232	Residential Mental Health Facilities	9	58	$28,964	$1,682,644
624	Social Assistance	10	124	$22,516	$2,781,931
6244	Child Day Care Services	8	123	$22,308	$2,732,453
	Leisure and Hospitality	44	683	$20,488	$13,992,423
72	Accommodation and Food Services	41	673	$20,592	$13,854,190
722	Food Services and Drinking Places	37	449	$18,408	$8,247,770
7221	Full-Service Restaurants	6	148	$16,068	$2,374,614
7222	Limited-Service Eating Places	24	260	$18,824	$4,889,591
7223	Special Food Services	6	40	$24,388	$971,958
	Other Services	44	196	$33,488	$6,558,296
81	Other Services, Ex. Public Admin	44	196	$33,488	$6,558,296
811	Repair and Maintenance	11	48	$35,672	$1,717,171
8111	Automotive Repair and Maintenance	9	44	$34,632	$1,508,879
812	Personal and Laundry Services	11	65	$20,384	$1,323,784
8121	Personal Care Services	7	54	$21,476	$1,152,000
813	Membership Organizations & Associations	7	62	$51,532	$3,195,316
814	Private Households	15	21	$15,600	$322,025
8141	Private Households	15	21	$15,600	$322,025

Transportation and Economic Development Element

Transaction Associates

Town of Bedford

Community Development Planning

Transportation and Economic Development Element

Prepared by:
TransAction Associates, Inc.
709 Main Street
Waltham, MA 02451

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Transportation and Economic Development Element

Introduction

TransAction Associates, under contract with the Metropolitan Area Planning Council (MAPC), surveyed employees of companies located in Bedford, Massachusetts to determine the potential for transit alternatives, as well as collecting data on trip origins, destinations, travel corridors, travel times, mode split, and attitudes toward the use of commuting alternatives. In addition, an employer survey was conducted to provide a snapshot of the economic activity within the town. The employer survey also examined the company's interest in promoting transportation alternatives through the provision and marketing of incentives such as the sale and distribution of MBTA transit passes. TransAction also looked at transit service to Bedford provided by the MBTA and other regional transit authorities. Further, TransAction met with the town's Planning Director and Planning Board members to discuss strategies to reduce the number of single-occupancy vehicles (SOVs) coming into the town—a key concern of Board members—by using transportation demand management (TDM) measures.

Based on the survey results and discussions with the Planning Board, the creation of a Transportation Management Association (TMA) was recommended. The TMA will create a partnership between the town's private- and public-sectors, and can help reduce the number of SOVs coming into the town by facilitating the formation of carpools and vanpools, assisting companies in implementing telecommuting programs and flextime work schedules, and offering incentives to encourage participation in alternatives. Further, the TMA could serve as a resource for employers and institutions that need to comply with the Massachusetts Rideshare Regulation.

In addition, if funding for new transit connections can be identified, TransAction is recommending the establishment of express transit service from the Route 3 north corridor and Bedford employment sites. This corridor represents more than 30 percent of the employees (approximately 3,300 commuters[1]) coming into the town for work. At this time, only limited service is provided by the Lowell Regional Transit Authority (LRTA) between Lowell, Billerica, Bedford, and Burlington with 60-minute headways. The service currently travels from the LRTA's intermodal facility in Lowell, along the Route 3A corridor, down Concord Road in Billerica, then along Middlesex Turnpike through Bedford and ending at Network Drive (i.e., the Sun Microsystems campus) in Burlington.

Survey Distribution Methodology

TransAction researched company names, addresses, number of employees, and contact names using an online research service called Reference USA. Calls were made to the companies to get accurate mailing addresses and numbers of employees. TransAction presented the findings to the town's Planning Board to determine the companies to be surveyed (see

[1] According to the 2000 Journey to Work data, representing the New Hampshire communities of Nashua, Hudson, Merrimack, Hollis, and Amherst, and the Massachusetts communities of Lowell, Chelmsford and Tyngsborough.

Appendix for a map showing the companies). A letter from the Bedford Town Administrator was distributed to more than 80 Bedford employers requesting their participation in the employee and employer surveys (a copy of the initial letter is included in the Appendix). Fewer than 10 companies responded to the initial mailing.

A considerable amount of time was spent on follow-up telephone calls, emails and contacting other resources such as the 128 Business Council and chambers of commerce to get other contact names and telephone numbers of people to contact. A few companies stated that they could not participate at this time due to a manufacturing deadline or that they were being acquired by a larger company. After pursuing employers for more than a month and in the interest of moving the study forward, it was determined to work with the 29 employers who agreed to participate in some part of the study.

TransAction met with 11 employers who agreed to distribute surveys to employees. As per a request from the town's Planning Board, the businesses were evenly distributed throughout the town's employment areas. TransAction also met with and interviewed 24 employers who completed the employer survey. Follow-up telephone interviews were conducted with some of the employers who completed the employer survey. In addition, 17 employers provided employee zip code data.

Transit Alternative Survey

The 11 companies that completed the employee survey represented 37 percent of the town's private-sector employee base (see Table 1 for a list of participating employers). The businesses also represent 35 percent of the Service Sector, 11 percent of the Manufacturing Sector, and 96 percent of the Government Sector[2]. Sectors not represented in the survey are the Trade, FIRE, Construction, and Agriculture/Fishing/Forestry sectors. Employers in these sectors were either not willing to conduct the survey or were not chosen to be surveyed because they had a small number of employees. The Planning Board requested that TransAction survey larger employers and asked to ensure that each employment area within the town was represented. In addition, while only 11.4 percent of the Manufacturing Sector was surveyed, TransAction spent a considerable amount of time trying to get Raytheon and Millipore to participate in the survey. The two companies represent 4,500 employees, or 74 percent of the manufacturing jobs in the town.

The participation rate varied among the employers from 23 percent to 68 percent of the employee population. The total number of employees responding to the survey was 3,214 or 43 percent of the participating employers' employee base. The respondents represented approximately 16 percent of the total private-sector employee base. A copy of the paper survey form is included in the Appendix. An online survey was developed for use by three of the companies.

[2] Survey numbers are compared to 2001 MA DET business sector numbers. Actual percentages may be higher due to recent layoffs that are not represented in the 2001 MA DET numbers.

Table 1
List of Companies Participating in Employee Survey

Name	NAICS Description	Total Employees	Employment Zone[3]
Carlton-Willard Village	Intermediate Care Facilities	160	1b
FUJIFILM	Magnetic and Optical Recording Media Manufacturing	150	1b
Hanscomb AFB	Government – Air Force Base	2,500	2
Hologic, Inc.	Surgical and Medical Instruments Manufacturing	200	1b
Medica Corp.	Analytical Laboratory Instrument Manufacturing	120	2
Middlesex Community College	Jr. College	250	3
MITRE Corp.	Research and Development in the Physical, Engineering and Life Sciences	1,826	1b
Progress Software	Software Publishers	600	1a
Renaissance Bedford Hotel	Hotels and Motels	120	1a
RSA Security	Security Systems Communication	220	1a
U.S. Veterans Hospital	Government – Hospital/Out-patient	1,400	3

The data collected through the survey was compiled by frequency and percent distribution, and then extrapolated to the employer's overall employee population based on their home zip codes. In some cases, the extrapolated data was applied to employees of other companies and based on the employee home zip code. This was done with companies that had a similar geographic location and business type to those companies that completed the employee survey. The extrapolated data dealt only with arrival/departure times, mode split, and quality of commute. The data was then compiled by Employment Zone and Travel Corridor.

Findings

The commuting habits of those employees who were surveyed tended to be very typical of employees who travel between suburbs for work. Most people drove alone, arrived between 7:00 and 8:00 AM, complained about the traffic but stated that their quality of commute was easy to acceptable, and would most likely not change to transit if a shuttle connection was provided between the workplace and transit stops.

[3] See Appendix for Map of Employment Zones. The Employment Zones, from the town's Comprehensive Plan of December 2002, were used to help determine travel corridors, the representation of the participating companies to all companies within specific geographic areas, and the extrapolation of survey data to companies that only submitted zip code data.

More specifically, the majority of respondents (84 percent) arrive between 6:00 and 9:00 AM, with the peak hour between 7:00 and 8:00 AM. Most respondents (65 percent) depart work between 2:30 and 5:00 PM, with the peak hour between 4:00 and 5:00 PM. The majority of respondents (89 percent) drive alone to work. Only 1 percent of the respondents take transit, 7 percent rideshare, and less than 1 percent bicycle or walk.

While employees may complain about the commute, 73 percent think the quality of their commute is easy to acceptable and 27 percent thought their commute was barely acceptable to unacceptable. If a transit shuttle was provided between the workplace and a transit stop/station, 29 percent of the respondents would very likely to somewhat likely use it. Tables 2 through 6 show the survey results by travel corridor.

Table 2
Peak Period Traffic Volumes[4]

Travel Corridor	Traffic Volumes	Percent Distribution
Rte 3 from North	1,529	26.8
Rte 3 from South	1,170	20.5
Middlesex Trp from North	306	5.4
Middlesex Trp from South	565	9.9
Rte 225 from East	1,699	29.8
Rte 225 from West	47	0.8
Rte 62 from West	6	0.1
Local	384	6.7
Total	5,706	

[4] Sample traffic volumes are based on survey results applied to zip code data and do not reflect the total number of vehicles traveling those corridors during the peak period.

Table 3
Peak Hour Arrival/Departure Times

Travel Corridor	AM Arrival	PM Depart
Rte 3 from North	7:00 to 8:00	3:30 to 4:30
Rte 3 from South	7:30 to 8:30	4:30 to 5:30
Middlesex Trp from North	8:00 to 9:00	5:00 to 6:00
Middlesex Trp from South	8:00 to 9:00	5:00 to 6:00
Rte 225 from East	7:00 to 8:00	3:30 to 4:30
Rte 225 from West	8:00 to 9:00	4:30 to 5:30
Rte 62 from West	8:00 to 9:00	5:00 to 6:00
Local	7:30 to 8:30	4:00 to 5:00

Table 4
Vehicle Mode Split[5] (Percent Distribution)

Travel Corridor	Drive Alone	Transit	Rideshare	Bike/Walk
Rte 3 from North	93	>1	5	
Rte 3 from South	94	1	3	
Middlesex Trp from North	94	>1	2	
Middlesex Trp from South	90	3	4	
Rte 225 from East	90	>1	8	
Rte 225 from West	96	0	4	
Rte 62 from West	100			
Local	86	1	5	7

[5] Corridor percentages may not add up to 100 percent because some respondents worked at home or did not come to the office during the week of the survey.

Table 5
Quality of Commute (Percent Distribution)

Travel Corridor	Easy to Acceptable	Barely Acceptable to Unacceptable
Rte 3 from North	73	27
Rte 3 from South	69	31
Middlesex Trp from North	70	30
Middlesex Trp from South	67	33
Rte 225 from East	78	22
Rte 225 from West	87	13
Rte 62 from West	77	23
Local	94	6

Table 6
Shuttle to Transit (Percent Distribution)

Travel Corridor	Not Likely	Very Likely to Somewhat Likely
Rte 3 from North	72	28
Rte 3 from South	71	29
Middlesex Trp from North	75	25
Middlesex Trp from South	61	39
Rte 225 from East	72	28
Rte 225 from West	83	17
Rte 62 from West	64	36
Local	77	23

The survey also asked employees if they would use a shuttle during the mid-day in order to access the retail section of Bedford. Shuttle connections to retail during the mid-day could reduce the need for driving alone to work because some employees would not have to use their vehicle to complete errands mid-day or during their commute to and/or from work. Survey results (see Table 7 below) show that less than 25 percent of the respondents answered “yes” to the question: If transit was provided between your place of work and the Town of Bedford’s retail area, would you use the service?

Table 7
Mid-Day Shuttle to Bedford Retail Area (Percent Distribution)

Employer Zone	Yes	No
1a	22	78
1b	18	82
2	21	79
3	25	75

Other incentives that the survey evaluated included the likelihood of switching to transit or ridesharing if a guaranteed ride home (GRH) was provided, on-site transit information, transit passes on-site, and help finding someone to rideshare with (see Table 8 below). For the most part, between 25 percent and 40 percent of the respondents were “very to somewhat likely” to switch to transit or ridesharing is the incentive was provided. The most popular incentive was the GRH benefit, where 40 percent of the respondents stated they were “very to somewhat likely” to switch if the incentive were available, followed by help finding someone to rideshare with at 34 percent, and vans available for ridesharing at 30 percent.

Table 8
Commuter Incentives (Percent Distribution)

Incentive	Not Likely	Very Likely to Somewhat Likely
TRANSIT		
GRH	60	40
On-site Information	75	25
Transit Passes On-site	72	28
RIDESHARING		
Vans available for ridesharing	70	30
Help finding someone with whom to carpool/vanpool	66	34
GRH	60	40

Economic Survey

The survey of employers, taken as a snapshot of economic development, was conducted at 24 Bedford companies (see Table 9 for a list of participating companies). A number of companies refused to participate in this survey because of the current economic climate, or did not have the time to complete the survey. The companies that did complete the survey represented the manufacturing, research, and education sectors. A copy of the survey questions and a compiled frequency and percent distribution report is included in the Appendix.

Table 9
List of Companies Participating in Employer Survey

Name	NAICS Description	Employees	Employment Zone
Amptek, Inc.	Electronic Components	22	2
Cambridge Heart, Inc.	Surgical and Medical Instruments and Apparatus	40	1a
Carlton-Willard Village	Intermediate Care Facilities	160	1b
CIS-US, inc.	Pharmaceutical Preparation	75	2
Discovery Labware	Biological Products	70	1a
Diversified Technologies, Inc.	Commercial, Physical, and Biological Research	40	2
East Coast Aviation	Airport and Airport Terminal Services	27	2
e-tractions	Marketing Consulting	12	2
Executive Flyers Aviation Corp.	Aviation School	40	2
FUJIFILM	Magnetic and Optical Recording Media Manufacturing	150	1b
GCC Technologies	Computer Peripheral Equipment	30	1b
Hologic, Inc.	Surgical and Medical Instruments Manufacturing	200	1b
Instinet	Security Brokers	13	3
Mabbett & Associates	Business Consulting Services	20	2
Medica Corp.	Analytical Laboratory Instrument Manufacturing	120	2
Middlesex Community College	Jr. College	250	3
MITRE Corp.	Research and Development in the Physical, Engineering and Life Sciences	1,826	1b
Progress Software	Software Publishers	600	1a

Name	NAICS Description	Employees	Employment Zone
Radex, Inc.	Computer Programming Services	18	2
Ramada Inn	Hotels and Motels	40	5
Renaissance Bedford Hotel	Hotels and Motels	120	1a
Joseph C. Sansone, Co.	Real Estate Other	9	5
Transwitch Communications	Semiconductors and Related Devices	35	1b
Veda Systems Solutions	Software Publishing	8	1b

Findings

According to the survey results, there has been a dramatic slow-down in economic activity. Most of the companies (65 percent) have decreased the number of their employees within the last two years. The industries that experienced some increases in employment during the same period include Biological Products, Electronic Components, Laboratory, Surgical and Medical Instruments, Computer Programming, Community College, and Aviation School. In the next 2 to 5 years, 35 percent of the companies see minimal increases of less than 10 new employees. Companies also responded to questions about increases and decreases in occupied space. As with employment, there is not a lot of activity, which is supported by the high vacancy rate in the area. In fact, almost all occupied space increases in the next few years will occur within the current building structure.

The survey questions were also used to determine employer efforts to reduce the number of employees who drive alone to work. While 30 to 56 percent of the companies provide showers, flextime, and/or bicycle racks, there are only two companies providing a full range of incentives to influence employee's use of the single-occupancy vehicle (SOV). A second set of questions were asked about the likelihood of the companies providing incentives to reduce the number of SOVs. According to the responses most companies are not likely to provide incentives. However, 30 percent of the companies that completed the survey, representing over 2,500 employees, stated that they have some interest in joining a Transportation Management Association. This is a more positive finding, because it may mean that there is an interest in addressing access issues as long as other employers are working on the effort. That is, most employers are not willing to do it on their own, but a few are willing to work on solutions together. Listed below are some of the findings:

- **Employment** 65 percent have decreased the number of employees within the last two years.

  35 percent have seen increases in the number of employees during the last two years.

  Industries that experienced an increase included: Biological Products, Electronic Components, Laboratory, Surgical and Medical Instruments, Computer Programming, Community College, and Aviation School.

  In the next year only 26 percent of the companies saw a slight increase in employees, while 74 percent saw no increase or a decrease in the number of employees.

  35 percent see an increase of less than 10 new employees in 2 to 5 years.

  70 percent see no increase in 6 to 10 years.

- **Occupied Space** Within the next year 75 percent of the companies see no increase in occupied space.

  25 percent see an increase of only 5,000 to 25,000 gsf within the next year.

  In 2 to 5 years 30 percent see an increase of 5,000 to 25,000 gsf.

  Only 15 percent see an increase of occupied space in 6 to 10 years, all within the range of 5,000 to 25,000 gsf.

- **TDM Measures** Only MITRE and RSA Security provide extensive commuter options programs to employees that include transit information, sale of MBTA transit passes (MITRE), and assistance with forming carpools.

  The most common measures available at other companies include showers (56 percent), flextime (44 percent) and bicycle racks (30 percent).

  23 percent of the companies provided no commuter assistance programs.

- **Likelihood of Providing Incentives**

  Most companies were not likely to provide any incentives that promote the use of alternative commuter options.

  The incentives most likely or somewhat likely to be implemented included showers and lockers, which already exist at many of the companies.

  Only 5 percent of the companies were somewhat likely to support a shuttle service between the worksite and transit station.

  Six companies, or 30 percent, were somewhat likely to join a Transportation Management Association (TMA).

  Companies interested in joining a TMA, representing an employee population of over 2,500 people, include: Discovery Labware, FUJIFILM, GCC Technology, Middlesex Community College, MITRE, and RSA Security.

Zip Code Analysis

In addition to the employee and employer surveys, 17 companies provided resident zip codes for each employee. This information was compiled to verify employee survey data, determine travel corridors and extrapolate survey data to the larger employee population. The data was also compared to the U.S. Census Journey to Work data supplied by MAPC to verify significance of the data as representative of the overall employee population. For the most part, the zip code origin data from the survey and the zip code information received from the employer was representative. For example, the employee zip code data showed that a significant number of employees (32.2 percent) come from the Route 3/Middlesex Turnpike north corridor (see the Appendix for a complete listing of employee by zip code). This finding was confirmed by the U.S. Census Journey to Work data.

Recommendations

The purpose of this evaluation is to make preliminary recommendations on potential opportunities for transit alternatives based on data collected through surveys, zip code information, and discussions with officials from the town of Bedford. Evaluation of the existing commuting options shows that there is only limited transit service to sections of Bedford. Given the lack of effective alternative transportation options, as the survey results show, the majority of employees drive to work alone and will continue to drive alone to work no matter what incentives are provided. This is typical of suburban areas where there is an abundance of free available parking and few transportation alternatives. However, results from the employee survey also indicate that there are a number of incentives that, if offered, could result in a shift from SOV to transit or ridesharing.

In addition, while many officials from the town support the use of transportation demand management (TDM) measures as a way to improve access and reduce traffic congestion on local streets,[6] the results of an official Town Meeting vote on whether to include TDM language in the zoning by-laws for business districts indicated that residents were not willing to do so. The general consensus among representatives was that they needed the business tax base and did not want to create the type of atmosphere that was anti-business. Therefore, the next option that would provide an effective mechanism for implementing TDM measures is the formation of a Transportation Management Association (TMA).

Based on the survey results, discussions with employers, and discussions with the Bedford Planning Board, we recommend the creation of express transit service especially from the Route 3 north travel corridor, a marketing efforts to promote ridesharing, and the formation of a TMA. These recommendations are described in more detail below.

<u>Express Bus Service</u>

Results of the employee survey and analysis of zip code data and U.S. Census Journey to Work data show that more than a third of the employees traveling to Bedford come from the Route 3 New Hampshire/Lowell area. Limited transit service is provided by the Lowell Regional Transit Authority (LRTA) from Lowell, through Billerica, to Bedford. The service runs every hour and only touches the Town of Bedford at the MITRE facility on Burlington Road via the Middlesex Turnpike. Commuters from the north travel to all of the town's employment zones. While the survey did not include a question about express bus service from the north, survey results of employees coming from the Route 3 north corridor show that 32 percent would very to somewhat likely take a shuttle connection between a transit stop and their place of employment. Most of these employees (64.4 percent) would be willing to travel on transit between 10 and 20 minutes more than their current driving time. The transit service would have to be reasonably priced from $1 to $4 per day and not require more than one transfer.

We recommend that the express service should start in the Nashua, NH area to board people from Nashua and other surrounding communities. Next stop would be near the intersection of Routes 3, 495, and the Lowell Connector, or at Route 3 and Route 110.[7] This stop could connect with the LRTA's Chelmsford Center route, which would link Lowell and Chelmsford residents to the express service. The service hours should be between 6:00 AM and 8:00 AM, to serve the morning peak period and 3:00 PM to 6:00 PM for the evening peak period. This matches the arrival and departure times shown in the employee survey for people coming from the Route 3 Middlesex Turnpike Corridor. Service should be every half hour.

By providing express bus service along this corridor (Nashua, Lowell, Bedford), commuters would have a viable alternative to driving alone. This type of cross-border service is similar to one that the Commonwealth of Massachusetts and the State of New Hampshire funded through a grant, in partnership with the Merrimack Valley Regional Transit Authority and the Junction TMO, to address the anticipated congestion created by the I-93 construction project.

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[6] This is based on meetings held with the town's Planning Board where TDM and TMAs were discussed.

[7] Possibly using the abandoned cinema complex on Route 110 in Chelmsford as a park-and-ride.

The MVRTA provides two trips in the morning and two in the evening from Exit 3 in Wyndham and Exit 4 in Londonderry, New Hampshire which then travels to the Ballardvale/Andover area in Massachusetts. The TMO also started a *Call & Commute* service, which is a first-come, first-served, door-to-door subscription bus service designed exclusively for employees of the member companies of the TMO in Andover and Wilmington. The service—which is for employees who live in Andover, North Andover, Lawrence, or Methuen—is also available at selected times for employees who use the Ballardville commuter rail station and is funded by the Merrimack Valley RTA, the Town of Andover and the Junction TMO.

In addition to the Route 3 north express shuttle, additional bus service from the MBTA should be explored. At this time the MBTA, via two bus routes, provides peak-hour bus service with 20-minute headways between the MBTA's Red Line service at Alewife Station, the Veterans Administration Hospital on Springs Road., Hanscom Field, and the Middlesex Turnpike/Oak Park section of Bedford. The routes are not direct routes and a trip can take at least 80 to 90 minutes between Alewife and the VA Hospital. In fact, according to the survey results, employees traveling on transit in this corridor have trip lengths of 21 to 40 miles and all have trip times of more than 61 minutes.

Local Bus Service

TransAction is not recommending a mid-day shuttle between the worksite and Bedford's retail area at this time. Results from the employer survey showed that many of the worksites either provide services such as cafeterias, banking/ATM, and postal services, or that the services are within walking distance. The goal of the mid-day shuttle is to reduce the need for a car during the day to complete errands, ultimately creating an incentive to leave your car at home and take an alternative. While 45 percent of the respondents to the employee survey stated that they need their car to do errands, only 21 percent of the employees were interested in the mid-day shuttle. At some future date, with the cooperation of the town and the private-sector, the demand for this service should be re-evaluated.

If enforcing TDM measures on the business community is unappealing, Bedford could take a more grass roots approach. The town could bring community stakeholders together to assess local transportation needs similar to a project in the Route 495 region. The MetroWest Transportation Equity Coalition (TEC) is a coalition of community organizations, local officials, public agencies, business leaders, social service agencies, civic organizations, and residents building broad-based support for public transportation. TEC is addressing the transportation needs of low-income residents, families, the elderly, the disabled, and the general public in the Route 495 region. The coalition is working to ensure that all groups are fairly represented in the planning, implementation, and management of transportation services.

Market Ridesharing

According to the employee survey, the majority of employees taking an alternative source of transportation to work are carpooling. While not a large number—7 percent of the employee population—this statistic does show that it is an option that employees are using. Further, as presented earlier in this report, there are a number of ridesharing incentives that, if offered, could shift additional employees into carpools.

At this time the state provides assistance to employees interested in ridesharing by helping them match with other people with similar trip origins and destinations.[8] However, as the employee survey shows, there are a number of employees who are unaware of the state's Commuter Options Program. As with most commuting alternatives, a substantial amount of effective marketing with continuous reminders has to be provided both inside and outside the workplace.

Formation of a TMA

A more effective mechanism to implement the recommendations above would be to form a Transportation Management Association. A TMA also satisfies the Planning Board's interest in using TDM measures to help reduce traffic congestion on the local street system. The economic and political climate within the town at this time may not justify incorporating TDM measures into zoning regulations. However, with the level of interest from the private-sector to form/join a TMA, as shown in the employer survey, the town may be able to achieve the goal of implementing TDM measures through the support of establishing a TMA.

TMAs are independent, non-profit organizations of business leaders and local officials working together to create opportunities to address and improve transportation access within a specific region. They promote the use of ridesharing and other commuting alternatives that help reduce traffic congestion and improve air quality. As more employers join the TMA and provide creative commuter incentives to its employees, other companies may join to become more competitive in attracting new employees.

A TMA, which was started with seed money from the Department of Energy Resources in 1992, had existed in the Bedford area under the auspices of the North Suburban Chamber of Commerce. TransAction Associates managed the organization from 1992 through 2000 and had received approval on a grant application in 2000 to merge the North Suburban and Greater Lowell TMAs into a "Route 3 TMA." MassHighway reallocated the grant funding to CARAVAN and the agency was to split a staff person between the two TMA locations who would expand the number of members and offer the Commuter Incentive Program[9] at no cost to employers. CARAVAN's efforts were unsuccessful[10] and the North Suburban TMA is no longer in operation. Unfortunately, the companies that *were* participating and paying membership fees such as MITRE, Guttierez, Lahey Clinic, Sun Microsystems, Middlesex Community College, and Hanscom AFB are no longer active members and may be unwilling to rejoin another effort.

[8] Previously this service was provided by CARAVAN for Commuters. It is now provided by URS and called MassRides. URS is proposing to institute a new web-based ridematching service under its contract.
[9] The program offered cash incentives to those who formed new carpools and vanpools, or who took transit. It also enabled those who participated in walking or bicycling to earn credits toward gift certificates.
[10] During the two-year period that CARAVAN was offering the Commuter Incentive Program not one company joined along with Route 3 corridor.

The Town of Bedford, based on discussions with the Planning Board members, is very interested in pursuing the implementation of TDM measures as a strategy to help reduce traffic congestion. While many of the companies who completed the employer survey stated that they are not likely to implement incentives to promote commuting alternatives, six companies stated that they are somewhat likely to join a TMA (see the Appendix for the results of the analysis on this section of the employer survey). The town's efforts to support the formation of a TMA could result over time in the implementation of incentives at companies less likely to do so at this time.

While several companies participated in the North Suburban TMA and there may be some interest in joining a new TMA by a number of Bedford companies, the town will have to play the role of initiator to make the TMA a reality. Guidance and direction from the town is necessary to bring the parties together and to provide technical expertise. In addition, the town has financial resources in the form of state and federal grants (Suburban Mobility and CMAQ/TDM Grants) that could be used to lay the groundwork for a TMA and fund the actual establishment of a TMA. The private sector could match all or part of the public funding.

The TMA will provide a forum for discussing how to improve access to companies located in Bedford. This discussion can range from the implementation of commuter incentives, such as online ridematching, to the establishment of express bus service. Once decisions have been made, the TMA is the entity to move forward the implementation and management of the recommendations.

Results from the employee survey show that there are a number of commuter incentives that could move employees toward using transit or ridesharing. For example, almost 40 percent of the respondents, who drive alone, stated that they would very to somewhat likely switch to transit or ridesharing if a guaranteed ride home was provided, 34 percent would switch if they had help finding someone else to ride with, 30 percent if short-term van leases were available, and 28 percent would switch to transit if transit passes were sold on-site. The TMA could easily implement these programs and have a fairly successful impact on reducing the number of SOVs without a considerable outlay of private funds.

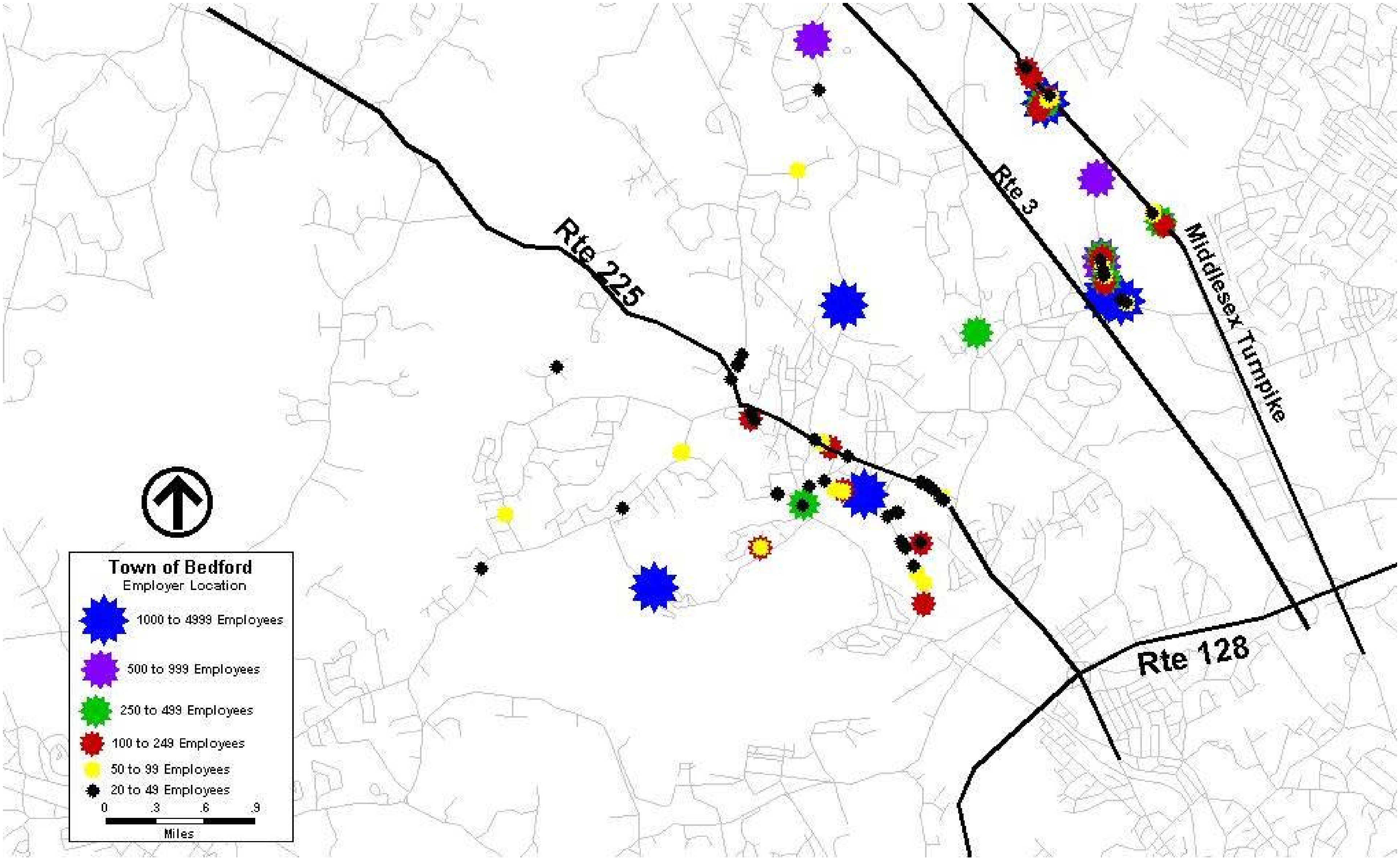
The express bus service option could be explored further through the TMA forum. The TMA through its members would be able to refine the service elements, service hours and pricing, and submit a proposal to the LRTA. In some cases regional transit authorities are willing to run subscription services if there is enough ridership to justify the service. The service could also be procured through a private bus carrier.

The TMA could also provide the MBTA with the necessary statistics and support to have the MBTA study a possible increase in service between Alewife and Bedford, or implement a pilot project using funds such as Job Access Reverse Commute, if available.

APPENDIX

- Map showing companies that participated in employee survey
- Town Manager Letter
- Employee Survey Form
- Employment Zone Map
- Employer Survey Form
- Employer Survey Results
- Zip Code Data Results
- Employer Survey Results – Response to TDM Questions by Employer

Map of Companies Located in Bedford


Town of Bedford
Employer Location
1000 to 4999 Employees
500 to 999 Employees
250 to 499 Employees
100 to 249 Employees
50 to 99 Employees
20 to 49 Employees
0 .3 .6 .9
Miles
Rte 225
Rte 3
Middlesex Turnpike
Rte 128

Letter from Bedford Town Administrator

Richard T. Reed, *Town Administrator*

Town Hall
Bedford, MA 01730
781-275-1111

Dear Bedford Employer:

The Town of Bedford is establishing a Community Development Plan to assist the town in planning for the future. While there are several components to the plan, the town is seeking assistance from key employers with two specific elements. The first is a transportation survey of employees; the second is an employer survey as described below:

- The **employee survey** will collect commuting and attitudinal information that will be used to determine if public transportation or other options to improve access are viable. This survey, which will take place in the fall, is also designed to assist employers in complying with the Department of Environmental Protection's Rideshare Regulation.[11]
- The **employer survey** will collect information on your business such as employment projections, infrastructure and space needs, impediments to growth, etc. — areas that affect economic development.

All data collected from the surveys will be provided to participating employers (for your individual company and the combined results). Both surveys will be available in paper format or on-line, should you have a preference.

The town has hired **TransAction Associates** of Waltham to conduct these surveys and interviews. Cindy Frené or Rob Tassinari of TransAction will be contacting you in the near future to determine your interest in participating in this project. If you would prefer to contact them, they can be reached at 781.895.1100. Please consider participating in this important effort. If you have any questions or need additional information, contact Richard Joly, Bedford Planning Director, at 781-275-1548.

Sincerely,

Richard T. Reed
Town Administrator

[11] Employers with more than 250 employees at a worksite must survey their employees every other year and report on how they commute to work to DEP. Employers are then required to implement measures to reduce drive-alone commuting; providing an update to DEP each year. Questions asked in Bedford's survey will be appropriate for use in reporting to DEP.

Employee Survey Form

Town of Bedford - Employee Commute Survey

As part of its Community Development Plan, the Town of Bedford is conducting a survey of employees at businesses located within the town's boundaries. Completing the survey will assist the town in addressing the needs and impacts of future economic growth. All surveys are anonymous and individual responses will be kept confidential. Please fill in an answer to EACH of the following questions and return this form to your department survey coordinator TODAY.

Using a black/blue pen or #2 pencil, please fill in each space completely. Do not check off or X out the space

1] What is your home town?

and ZIP code? (write number in box and mark corresponding bubbles below)

0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

2] What time do you usually begin work in the morning?

Before 6AM ☐ 6:00-7:00 ☐ 7:00-7:30 ☐ 7:30-8:00 ☐ 8:00-8:30 ☐ 8:30-9:00 ☐ After 9:00 AM ☐

3] What time do you usually leave work in the afternoon?

Before 4PM ☐ 4:00-4:30 ☐ 4:30-5:00 ☐ 5:00-5:30 ☐ 5:30-6:00 ☐ 6:00-7:00 ☐ 7:00-8:00 ☐ After 8:00 PM ☐

4] How often do you vary your work hours by more than 30 minutes from these times?

Never ☐ 1-2 days/week ☐ 3+ days/week ☐ 1-2 days/month ☐

5] How many hours are you scheduled to work each week?

Less than 17 ☐ 17-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 41-45 ☐ More ☐

6] How long does it take you to travel to work on a typical day? (minutes one way)

5 to 15 min ☐ 16 to 30 min ☐ 31 to 45 min ☐ 46 to 60 min ☐ 61+ min ☐

7] How many miles (approximately) do you travel from home to work on a typical day? (miles one way)

1 to 10 miles ☐ 11 to 20 miles ☐ 21 to 40 miles ☐ 41 to 60 miles ☐ 61 to 100 miles ☐ More ☐

8] Please indicate how you commuted to work each day THIS WEEK (please note primary mode only).

	Mon	Tue	Wed	Thu	Fri
Drove alone the entire way	☐	☐	☐	☐	☐
Drove alone, then took public transportation	☐	☐	☐	☐	☐
Walked, then took public transportation	☐	☐	☐	☐	☐
Shared ride/dropped off, then took public transportation	☐	☐	☐	☐	☐
Bicycled, then took public transportation	☐	☐	☐	☐	☐
Rode in a 2-person carpool	☐	☐	☐	☐	☐
Rode in a 3- to 7-person carpool	☐	☐	☐	☐	☐
Rode in an 8- or more person vanpool	☐	☐	☐	☐	☐
Dropped off at work (by taxi or other)	☐	☐	☐	☐	☐
Bicycled	☐	☐	☐	☐	☐
Walked	☐	☐	☐	☐	☐
Out of office (sick, vacation, jury duty, business trip, etc.)	☐	☐	☐	☐	☐
Scheduled day off (compressed work week)	☐	☐	☐	☐	☐
Worked at home	☐	☐	☐	☐	☐

9] Why have you chosen your commute method this week?

- Convenience ☐
- Cost ☐
- No other option ☐
- Other (please describe below) ☐

10] How many times a month (on average) do you use your OWN car for WORK-RELATED BUSINESS during the day?

- None ☐
- 1 to 4 ☐
- 5 or more ☐

* See reverse side for additional questions*

11] **Please rate the quality of your commute:**

easy	acceptable	barely acceptable	unacceptable
☐	☐	☐	☐

12 a] **If you drive to work, where is the vehicle usually parked?**

- Parking lot at worksite ☐
- Parking lot off-site ☐
- On-street ☐

b] **If you drive only part of the way, where do you usually park?**

- Train station ☐
- Park and Ride lot ☐
- On-street ☐
- Other ☐

Please answer Questions 13-18 only if you drive alone to work.

13] **What are your reasons for driving alone to work?**
(mark all that apply)

- ☐ Enjoy my privacy, prefer to drive alone
- ☐ Hours are irregular
- ☐ Need car for business
- ☐ Need car for errands before/after work or during day
- ☐ Do not have any other option
- ☐ Need car in case of emergencies
- ☐ Difficulty finding others with whom to carpool
- ☐ Driving alone takes less time
- ☐ Take children to school or daycare
- ☐ Public transit is not safe
- ☐ Public transit costs too much
- ☐ Transit schedules or routes don't work for me
- ☐ Need car to carry large items

14] **How often, on average, do you make stops between home and work to do errands or for other purposes?**

Once a week or less	2 to 3 times per week	Nearly every day
☐	☐	☐

15] **What concerns you most about your commute?**
(mark all that apply)

- ☐ Overall travel time from home to work
- ☐ Cost of commute
- ☐ Finding a convenient parking space
- ☐ Congestion on streets and highways
- ☐ Frustration of commuting
- ☐ Concerned about bad weather
- ☐ Other (please explain)___________________

16] **How likely would you be to change to ridesharing or transit IF THE FOLLOWING INCENTIVES OR SERVICES WERE AVAILABLE?**

	Very Likely	Somewhat Likely	Not Likely
TRANSIT			
a] Guaranteed Ride Home program in case of emergencies or unscheduled overtime	☐	☐	☐
b] On-site information on transit routes and schedules	☐	☐	☐
c] Shuttle to a transit stop/station	☐	☐	☐
d] Transit pass subsidy	☐	☐	☐
CARPOOL/VANPOOL			
e] Vans available for ridesharing	☐	☐	☐
f] Preferential or reserved parking for employees who rideshare	☐	☐	☐
g] Help finding someone with whom to carpool/vanpool	☐	☐	☐
h] Car made available for business use during the day	☐	☐	☐
i] Guaranteed Ride Home program in case of emergencies or unscheduled overtime	☐	☐	☐

17] **If transit was provided between your place of work and the Town of Bedford's retail area, would you use the service?** ☐ Yes ☐ No

18] **What would a transit service have to be like in order for you to take it regularly?**

	0	10	20	30
a] A transit trip that is no longer than __ minutes more than my current driving time.	☐	☐	☐	☐

	\$1 or less	\$2-\$4	\$5-\$7
b] A transit fare no more than __ per day.	☐	☐	☐

	1	2	3
c] A transit trip requiring not more than __ transfers.	☐	☐	☐

In the space below please provide any further comments about your commute or your use of transit.

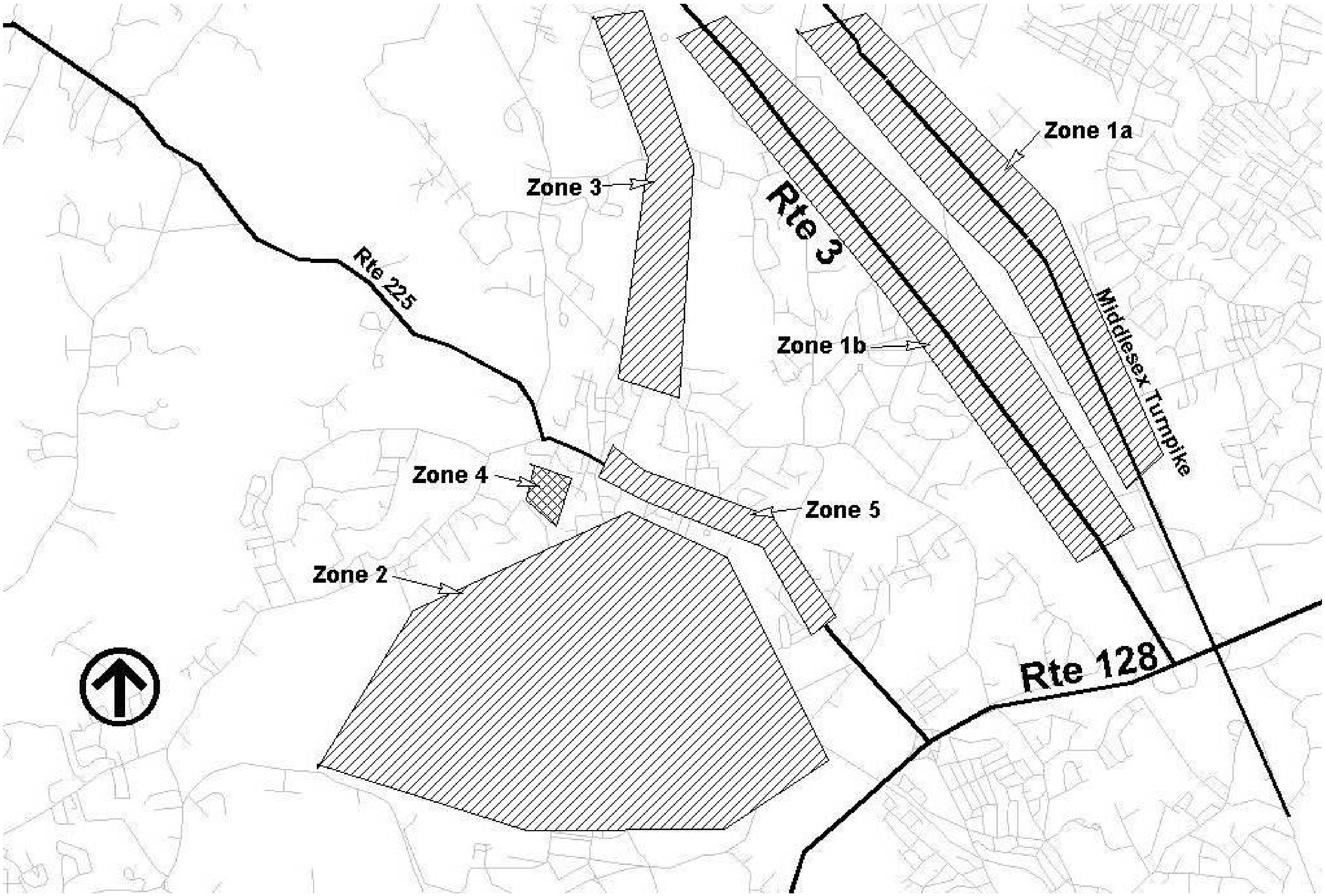
____

____

____

Thank you for completing this survey.

Map of Employment Zones



Zone 1a
Zone 3
Rte 3
Zone 1b
Middlesex Turnpike
Rte 225
Zone 4
Zone 5
Zone 2
Rte 128

Employer Survey Form

Town of Bedford - Employer Survey

As part of its Community Development Plan, the Town of Bedford is conducting a survey of employers located within the town's boundaries. Please take a moment to complete this survey. Completing the survey will assist the town in addressing the needs and impacts of future economic growth. Return the survey to: **Bedford Study c/o TransAction Associates, Inc. 709 Main St. Waltham, MA 02451**

Company Name: ____________________ **Telephone:** ____________________

Respondent Name: ____________________ **Title:** ____________________ **Ext:** ____________________

Primary Address: ____________________

Email Address: ____________________ **Fax Number:** ____________________

1. Type of Business (include SIC code(s) if known): ____________________

	1-4	5-9	10-14	15-19	20-24	25+
2. How long has your business been in operation (in years)?	☐	☐	☐	☐	☐	☐
3. How long has your business been located in Bedford (in years)?	☐	☐	☐	☐	☐	☐

4. Why did you locate your business in Bedford (mark all that apply)?

- ☐ Access to customers
- ☐ Charm of the area
- ☐ Infrastructure to support commerce
- ☐ Close to home
- ☐ Cost/availability of real estate
- ☐ Proximity to major highways
- ☐ Parking availability
- ☐ Skilled labor market
- ☐ Other ____________________

5. To what degree have your original expectations been met (1= not at all and 5=very much)? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

6. Do you own or lease this property? ☐ Own ☐ Lease

7. How many people do you employ at your site? ☐ 1-9 ☐ 10-19 ☐ 20-49 ☐ 50-99 ☐ 100-249 ☐ 250-499 ☐ 500-999 ☐ 1000-4999 ☐ 5000+

8. Has the number of employees at your site increased or decreased within the last two years? ☐ Increased ☐ Decreased

9. What do you expect your employment numbers to be in: 1 yr ________ 2-5 yrs ________ 6-10 yrs ________

10. What is the total gross square footage of your site? ________ **Unoccupied space, if any (in GSF)?** ________

11. What do you expect the total gross square footage needs to be in: 1 yr ________ 2-5 yrs ________ 6-10 yrs ________

12. Do you plan to expand to another site in Bedford within the next 2 to 5 years? ☐ Yes ☐ No

13. If YES, where is the new location (please specify street address or nearest intersection)? ____________________

14. What are the START and END times of your shift(s)?

	Start Time(s)	End Time(s)
1st Shift	________	________
2nd Shift	________	________
3rd Shift	________	________

15. Select and rank the top 5 issues (1 being the highest) in terms of impact on plans for growth and continued success of your company.

- — available labor skills/capabilities
- — capital availability
- — competition
- — customer demand
- — domestic market growth
- — export market growth
- — interest rates/investment climate
- — labor costs
- — leadership/management
- — production automation
- — production efficiencies
- — raw materials/supplies
- — research & development
- — taxes
- — transportation access
- — other(s) ____________________

***** SEE REVERSE SIDE FOR ADDITIONAL QUESTIONS *****

16. How would you rate the following utilities?

	Excellent	Average	Poor
Electricity	☐	☐	☐
Natural Gas	☐	☐	☐
Water	☐	☐	☐
Sewer	☐	☐	☐
Telephone	☐	☐	☐

17. Does your local telephone company currently have fiber optic cable at your business location? ☐ Yes ☐ No

18. Please mark any of the following services that are located on-site or within walking distance:

☐ Cafeteria/Restaurant ☐ Credit Union ☐ Postal Services ☐ Convenience Store
☐ Daycare Facilities ☐ Bank/ATM ☐ Dry Cleaner
☐ Gym/Fitness Center ☐ Medical Services ☐ Pharmacy
☐ Other: ______________________________

19. Please mark and make comments on the local or state regulations you would like to recommend changes to?

☐ Planning/Zoning ______________________________

☐ Fire ______________________________

☐ Signage ______________________________

☐ Building Permits ______________________________

☐ Streets/Drainage ______________________________

☐ Other (please describe) ______________________________

The Town of Bedford is in the process of implementing Transportation Demand Management (TDM) measures to help address traffic congestion through the reduction of single-occupant vehicle use (employees driving alone to work). TDM measures include activities that both an employer and its employees would participate in such as ridesharing in carpools or vanpools, transit use, alternative work schedules, etc. The following questions deal with your attitude toward these measures.

20. Does your business provide any of the following TDM measures?

☐ Carpool matching ☐ Shuttles to off-site parking ☐ Commuter Check Program
☐ Transit subsidies ☐ Emergency Ride Home Program ☐ Bicycle racks
☐ On-site MBTA pass sales ☐ Designated carpool spaces ☐ Showers
☐ Shuttle from transit stop/station ☐ On-site transit information ☐ Flextime
☐ Staggered Work Hours ☐ Telework (work from home) ☐ None of the above

21. If you do not provide these incentives, how likely is your company to implement the following incentives in order to reduce the number of employees who drive alone to your site? (mark one space for each option)

	Very Likely	Somewhat Likely	Not Likely
Emergency Ride Home program	☐	☐	☐
On-site information on transit routes and schedules	☐	☐	☐
Shuttle to train/bus station	☐	☐	☐
Subsidy for transit/vanpool fares	☐	☐	☐
On-site sale of transit passes	☐	☐	☐
Preferential or reserved parking for employees who rideshare	☐	☐	☐
Help employees find someone with whom to carpool/vanpool	☐	☐	☐
Bicycle storage made available	☐	☐	☐
Showers and lockers made available	☐	☐	☐
Alternative work schedule	☐	☐	☐
Join a Transportation Management Association*	☐	☐	☐

** A Transportation Management Association, or TMA, is a group of employers who work together to address employee and/or customer access issues to the worksite. By working cooperatively, the companies are able to share the costs of implementing most TDM measures. The TMA may also be eligible for state and federal assistance to help support the TMA's efforts. The TMA also helps reduce costs in other areas through economies of scale.*

Thank you for completing this questionnaire!

Employer Survey Results

Town of Bedford
Employer Survey Results 2003

1a. Type of Business (SIC Code).			
	Counts	Percents	Percents 0 100
2834	1	4.2%	
2836	1	4.2%	
3577	1	4.2%	
3674	1	4.2%	
3679	1	4.2%	
3695	1	4.2%	
3721	1	4.2%	
3826	1	4.2%	
3841	3	12.5%	
4581	1	4.2%	
6211	1	4.2%	
6531	1	4.2%	
7011	2	8.3%	
7371	1	4.2%	
7372	1	4.2%	
8052	1	4.2%	
8222	1	4.2%	
8249	1	4.2%	
8731	1	4.2%	
8742	1	4.2%	
8748	1	4.2%	
Totals	24	100.0%	

1b. Type of Business (NAICS Code).			
	Counts	Percents	Percents 0 100
48819	1	4.2%	
54171	2	8.3%	
72111	2	8.3%	
325412	1	4.2%	
325414	1	4.2%	
334119	1	4.2%	
334413	1	4.2%	
334419	1	4.2%	
334516	1	4.2%	
334613	1	4.2%	
339112	3	12.5%	
511210	1	4.2%	
523120	1	4.2%	
531390	1	4.2%	
541511	1	4.2%	
541613	1	4.2%	
541620	1	4.2%	
611210	1	4.2%	
611512	1	4.2%	
623110	1	4.2%	
Totals	24	100.0%	

2. How many years has your business been in operation?			
	Counts	Percents	Percents 0 100
1-4	1	4.2%	
5-9	1	4.2%	
10-14	3	12.5%	
15-19	6	25.0%	
20-24	4	16.7%	
25+	9	37.5%	
Totals	24	100.0%	

3. How many years has your business been located in Bedford?			
	Counts	Percents	Percents 0 100
1-4	4	16.7%	
5-9	3	12.5%	
10-14	5	20.8%	
15-19	4	16.7%	
20-24	1	4.2%	
25+	7	29.2%	
Totals	24	100.0%	

4. Why did you locate your business in Bedford (Mark all that apply)?			
	Counts	Percents	Percents 0 100
Access to customers	6	25.0%	
Charm of the area	2	8.3%	
Infrastructure	0	0.0%	
Close to home	7	29.2%	
Cost/affordability of real estate	10	41.7%	
Proximity to major highways	10	41.7%	
Parking availability	2	8.3%	
Skilled labor market	6	25.0%	
Other	10	41.7%	
Totals	24	n/a	

5. To what degree have your original expectations been met (1= not at all and 5 = very much)?			
	Counts	Percents	Percents 0 100
Rated 1	0	0.0%	
Rated 2	0	0.0%	
Rated 3	4	19.0%	
Rated 4	14	66.7%	
Rated 5	3	14.3%	
Totals	21	100.0%	

6. Do you own or lease your property?			
	Counts	Percents	Percents 0 100
Own	7	30.4%	
Lease	16	69.6%	
Totals	23	100.0%	

7. How many people do you employ at your site?			
	Counts	Percents	Percents 0 100
1-9	2	8.3%	
10-19	5	20.8%	
20-49	8	33.3%	
50-99	2	8.3%	
100-249	5	20.8%	
250-499	1	4.2%	
500-999	0	0.0%	
1000-4999	1	4.2%	
5000+	0	0.0%	
Totals	24	100.0%	

8. Has the number of employees at your site increased or decreased within the last two years?			
	Counts	Percents	Percents 0 100
Increased	9	37.5%	
Decreased	15	62.5%	
Totals	24	100.0%	

9. Will your number of employees decrease/increase and by how much in:

One year	Counts	Percents	Percents 0–100
Continued decrease	1	4.2%	
No increase	17	70.8%	
Increase of 10 or less	4	16.7%	
Increase of 11 to 25	1	4.2%	
Increase of 26 to 50	1	4.2%	
Incease of 51 to 100	0	0.0%	
Increase of 100+	0	0.0%	
Totals	24	100.0%	

2 to 5 years	Counts	Percents	Percents 0–100
Continued decrease	1	4.2%	
No increase	10	41.7%	
Increase of 10 or less	9	37.5%	
Increase of 11 to 25	1	4.2%	
Increase of 26 to 50	2	8.3%	
Incease of 51 to 100	1	4.2%	
Increase of 100+	0	0.0%	
Totals	24	100.0%	

6 to 10 years	Counts	Percents	Percents 0–100
Continued decrease	0	0.0%	
No increase	16	66.7%	
Increase of 10 or less	4	16.7%	
Increase of 11 to 25	1	4.2%	
Increase of 26 to 50	1	4.2%	
Incease of 51 to 100	1	4.2%	
Increase of 100+	1	4.2%	
Totals	24	100.0%	

10a. What is your Gross Square Feet (GSF) at the site?			
	Counts	Percents	Percents 0 100
5,000 GSF or less	4	19.0%	
5,001 to 10,000	2	9.5%	
10,001 to 25,000	4	19.0%	
25,001 to 50,000	5	23.8%	
50,001 to 100,000	0	0.0%	
100,001 to 150,000	1	4.8%	
150,001 to 200,000	0	0.0%	
200,001 to 250,000	4	19.0%	
250,001+	1	4.8%	
Totals	21	100.0%	

10b. What is your unoccupied space?			
	Counts	Percents	Percents 0 100
0 GSF	14	73.7%	
5,000 GSF or less	2	10.5%	
5,001 to 10,000	1	5.3%	
10,001 to 25,000	1	5.3%	
25,001 to 50,000	1	5.3%	
50,001 to 100,000	0	0.0%	
100,001 to 150,000	0	0.0%	
150,001 to 200,000	0	0.0%	
200,001 to 250,000	0	0.0%	
Totals	19	100.0%	

11. Will your GSF needs decrease/increase and by how much in:

1 year	Counts	Percents	Percents 0 100
Decrease	1	4.8%	
No increase	16	76.2%	
Increase of 5,000 GSF or less	0	0.0%	
Increase of 5,001 to 25,000	4	19.0%	
Increase of 25,001 to 50,000	0	0.0%	
Increase of 50,001 to 100,000	0	0.0%	
Increase of 100,001 +	0	0.0%	
Totals	21	100.0%	

2 to 5 years	Counts	Percents	Percents 0 100
Decrease	1	4.8%	
No increase	13	61.9%	
Increase of 5,000 GSF or less	2	9.5%	
Increase of 5,001 to 25,000	5	23.8%	
Increase of 25,001 to 50,000	0	0.0%	
Increase of 50,001 to 100,000	0	0.0%	
Increase of 100,001 +	0	0.0%	
Totals	21	100.0%	

6 to 10 years	Counts	Percents	Percents 0 100
Decrease	0	0.0%	
No increase	16	80.0%	
Increase of 5,000 GSF or less	1	5.0%	
Increase of 5,001 to 25,000	2	10.0%	

[Continuing table]

6 to 10 years	Counts	Percents	Percents 0–100
Increase of 25,001 to 50,000	0	0.0%	
Increase of 50,001 to 100,000	0	0.0%	
Increase of 100,001 +	1	5.0%	
Totals	20	100.0%	

12. Do you plan to expand to another site in Bedford within the next 2 to 5 years?	Counts	Percents	Percents 0–100
Yes	3	12.5%	
No	21	87.5%	
Totals	24	100.0%	

14. What are the start and end times of your shifts?

First Shift Start	Counts	Percents	Percents 0–100
No shifts	5	22.7%	
Before 6:00 AM	1	4.5%	
6:00 to 7:00 AM	5	22.7%	
7:00 to 8:00 AM	6	27.3%	
8:00 to 9:00 AM	5	22.7%	
After 9:00 AM	0	0.0%	
Totals	22	100.0%	

First Shift End	Counts	Percents	Percents 0–100
Before 3:00 PM	1	5.9%	
3:00 to 4:00 PM	4	23.5%	
4:00 to 5:00 PM	5	29.4%	
5:00 to 6:00 PM	5	29.4%	
After 6:00 PM	2	11.8%	

[Continuing table]

First Shift End	Counts	Percents	Percents 0 100
Totals	17	100.0%	

Second Shift Start	Counts	Percents	Percents 0 100
3:00 PM	5	83.3%	
3:30 PM	1	16.7%	
4:00 PM	0	0.0%	
4:30 PM	0	0.0%	
Totals	6	100.0%	

Second Shift End	Counts	Percents	Percents 0 100
11:00 PM	4	66.7%	
11:30 PM	1	16.7%	
12:00 AM	1	16.7%	
Totals	6	100.0%	

Third Shift Start	Counts	Percents	Percents 0 100
10:00 PM	2	33.3%	
11:00 PM	4	66.7%	
12:00 PM	0	0.0%	
Totals	6	100.0%	

Third Shift End	Counts	Percents	Percents 0 100
5:00 AM	1	16.7%	
6:00 AM	1	16.7%	
7:00 AM	4	66.7%	
8:00 AM	0	0.0%	
Totals	6	100.0%	

15. Top five issues in terms of impact on growth.

	Frequencies:					
	Rated 1	Rated 2	Rated 3	Rated 4	Rated 5	Totals
Impact on growth						
Available labor skills/capabilities	4.0	3.0	3.0	1.0	1.0	12.0
Capital availability	1.0	1.0	0.0	0.0	1.0	3.0
Competition	2.0	2.0	3.0	2.0	2.0	11.0
Customer demand	7.0	5.0	2.0	1.0	2.0	17.0
Domestic market growth	3.0	1.0	5.0	1.0	0.0	10.0
Export market growth	0.0	2.0	0.0	2.0	2.0	6.0
Interest rates/investment climate	0.0	1.0	0.0	0.0	1.0	2.0
Labor costs	0.0	1.0	2.0	2.0	1.0	6.0
Leadership/management	1.0	1.0	2.0	3.0	0.0	7.0
Production automation	1.0	0.0	0.0	0.0	1.0	2.0
Production efficiencies	0.0	2.0	1.0	2.0	1.0	6.0
Raw materials/supplies	0.0	0.0	1.0	0.0	1.0	2.0
Research & development	2.0	0.0	0.0	4.0	4.0	10.0
Taxes	0.0	0.0	1.0	1.0	0.0	2.0
Transportation access	0.0	0.0	1.0	1.0	1.0	3.0

16. How would you rate the following utilities?

	Frequencies:			
	Excellent	Average	Poor	Totals
Utilities				
Electricity	7.0	14.0	2.0	23.0
Natural Gas	8.0	11.0	1.0	20.0
Water	5.0	16.0	2.0	23.0
Sewer	6.0	17.0	0.0	23.0
Telephone	7.0	15.0	1.0	23.0

17. Does your local telephone company currently have fiber optic cable at your business location?

	Counts	Percents	Percents 0 100
Yes	9	47.4%	
No	10	52.6%	
Totals	19	100.0%	

18. Please mark any of the following services that are located on-site or within walking distance.	Counts	Percents
Cafeteria/Restaurant	14	73.7%
Daycare Facility	3	15.8%
Gym/Fitness Center	8	42.1%
Credit Union	4	21.1%
Bank/ATM	14	73.7%
Medical Services	6	31.6%
Postal Services	9	47.4%
Dry Cleaner	9	47.4%
Pharmacy	6	31.6%
Convenience Store	9	47.4%
Other	1	5.3%
Totals	19	n/a

20. Does your business provide any of the following TDM measures?	Counts	Percents
Carpool matching	2	8.3%
Transit subsidy	0	0.0%
On-site MBTA pass sales	1	4.2%
Shuttle from transit stop/station	1	4.2%
Staggered work hour	6	25.0%
Shuttles to off-site parking	1	4.2%
Emergency Ride Home Program	3	12.5%
Designated carpool spaces	2	8.3%
On-site transit information	4	16.7%
Telework (work from home)	7	29.2%
Commuter Check Program	0	0.0%
Bicycle racks	7	29.2%
Showers	13	54.2%
Flextime	10	41.7%
None of the above	6	25.0%
Totals	24	n/a

21. How likely is your company to implement the following incentives in order to reduce the number of employees who drive alone to your site?

	Frequencies:			
	Very Likely	Somewhat Likely	Not Likely	Totals
Incentives				
Emergency Ride Home Program	1.0	3.0	16.0	20.0
On-site information on transit routes and schedules	2.0	6.0	11.0	19.0
Shuttle to train/bus station	0.0	1.0	18.0	19.0
Subsidy for transit/vanpool fares	0.0	1.0	19.0	20.0
On-site sale of transit passes	0.0	2.0	16.0	18.0
Preferential or reserved parking spaces for employees who rideshare	0.0	3.0	15.0	18.0
Help employees find someone with whom to carpool/vanpool	1.0	6.0	12.0	19.0
Bicycle storage made available	3.0	5.0	10.0	18.0
Showers and lockers made available	7.0	2.0	8.0	17.0
Alternative work schedule	2.0	5.0	10.0	17.0
Join a TMA	0.0	4.0	16.0	20.0

Zip Code Analysis

	Rte 3 from the North	Rte 3 from the North, or Concord Rd from the North, or Chelmsford Rd from the North	Rte 225 from East	Rte 225 from West	Rte 2/2A from East	Rte 2/2A from West	Rte 128 from North	Rte 128 from South	Local	Total
LOWELL	417									417
BILLERICA		273								273
NASHUA NH	262									262
CHELMSFORD	256									256
BEDFORD									203	203
BURLINGTON							173			173
HANSCOM AFB									150	150
WESTFORD	141									141
DRACUT	137									137
LEXINGTON			121						8	129
WOBURN							115			115
ARLINGTON			11		102					113
BOSTON					107					107
TEWKSBURY	105									105
WALTHAM								92		92
ACTON						73				73
TYNGSBORO	71									71
CAMBRIDGE					68					68
HUDSON NH							66			66
LAWRENCE							59			59
SOMERVILLE					59					59
METHUEN							58			58
WILMINGTON							56			56
LEOMINSTER						53				53
MERRIMACK NH	53									53
AYER						47				47
CONCORD						47				47
PEPPERELL	47									47
GROTON						46				46
MEDFORD					26		18			44
ANDOVER							43			43
BOXBOROUGH								43		43
CARLISLE				43						43
READING							43			43
WAKEFIELD							43			43
WINCHESTER							42			42
LITTLETON						40				40
NEWTON								38		38
NORTH CHELMSFORD	38									38
WATERTOWN					37					37
HAVERHILL							36			36
FRAMINGHAM								35		35

MELROSE							35			35
BELMONT			3		30					33
SUDBURY								32		32
TOWNSEND						32				32
NORTH BILLERICA	31									31
SALEM NH							31			31
BROOKLINE					30					30
LONDONDERRY NH	30									30
NORTH ANDOVER							30			30
STONEHAM							30			30
AMHERST NH	28									28
FITCHBURG						28				28
HUDSON						26	2			28
LYNN							28			28
PELHAM NH	28									28
NORTH READING							26			26
WORCESTER								26		26
BEVERLY							25			25
DERRY NH							25			25
MALDEN							25			25
PEABODY							25			25
WAYLAND								25		25
NATICK								24		24
DUNSTABLE	23									23
MAYNARD						23				23
SALEM							22			22
WINDHAM NH	22									22
SHIRLEY						21				21
STOW								20		20
HARVARD						18				18
HOLLIS NH	18									18
MANCHESTER NH	18									18
MARLBOROUGH								18		18
LUNENBURG						17				17
MILFORD NH	17									17
DANVERS							15			15
SAUGUS							15			15
WELLESLEY								15		15
WEST ROXBURY					15					15
BROOKLINE NH	14									14
BOLTON								13		13
WESTON								13		13
ASHLAND								12		12
BEDFORD NH	12									12
CLINTON						12				12
DEDHAM								12		12
LANCASTER						12				12
LINCOLN									12	12
LITCHFIELD NH							12			12

NORWOOD								12		12
QUINCY								12		12
RANDOLPH								12		12
SHREWSBURY						12				12
WELLESLEY HILLS								12		12
WESTMINSTER						12				12
BOXFORD							11			11
GARDNER						11				11
MILFORD								11		11
ALLSTON					10					10
EVERETT							10			10
REVERE							10			10
NASHUA	9									9
NEEDHAM								9		9
NEWBURYPORT							9			9
ROCKLAND								9		9
WESTWOOD								9		9
ATKINSON NH							8			8
BROCKTON								8		8
FRANKLIN								8		8
GLOUCESTER							8			8
GROVELAND							8			8
HOPKINTON								8		8
LYNNFIELD							8			8
MIDDLETON							8			8
NEWTON CENTER								8		8
NEWTON NH							8			8
PLAISTOW NH							8			8
WEST NEWTON								8		8
BRIGHTON					7					7
CANTON								7		7
EXETER NH							7			7
HAMPTON NH							7			7
MEDFIELD								7		7
MERRIMAC							7			7
NAHANT							7			7
NEWTONVILLE								7		7
NORTHBOROUGH								7		7
SOUTHBOROUGH								7		7
STOUGHTON								7		7
ATTLEBORO								6		6
BRAINTREE								6		6
CHELSEA							6			6
HAMPSTEAD NH	6									6
HOLLISTON								6		6
JAMAICA PLAIN					6					6
MANSFIELD								6		6
MARBLEHEAD							6			6
NEW IPSWICH NH	6									6

NORFOLK								6		6
TEMPLETON						6				6
WEST TOWNSEND						6				6
WESTBOROUGH								6		6
CHESTNUT HILL								5		5
DOVER NH							5			5
FOXBORO								5		5
HUBBARDSTON						5				5
MILTON								5		5
NEWTON UPPER FALLS								5		5
SANDOWN NH							5			5
SHARON								5		5
TAUNTON								5		5
WALPOLE								5		5
ASHBURNHAM						4				4
ATHOL						4				4
AUBURNDALE								4		4
BELLINGHAM								4		4
DUXBURY								4		4
IPSWICH							4			4
MILLIS								4		4
NEWBURY							4			4
NORTH ATTLEBORO								4		4
ROCKPORT							4			4
ROSLINDALE					4					4
SEABROOK NH							4			4
STERLING								4		4
SWAMPSCOTT							4			4
WEST NEWBURY							4			4
WHITINSVILLE								4		4
WILTON NH	4									4
AMESBURY	3									3
ASHBY						3				3
CHESTER NH							3			3
HOOKSETT NH							3			3
MILLBURY								3		3
MONT VERNON NH	3									3
NEEDHAM HEIGHTS								3		3
NEW BEDFORD								3		3
NEW BOSTON NH	3									3
PLAINVILLE								3		3
PLYMOUTH								3		3
PORTSMOUTH NH							3			3
RINDGE NH	3									3
ROWLEY							3			3
SOUTH HAMILTON							3			3
SPENCER								3		3
STRATHAM NH							3			3
UPTON								3		3

UXBRIDGE								3		3
VILLAGE OF NAGOG WOODS				3						3
WABAN								3		3
WEST BOYLSTON						3				3
WINCHENDON						3				3
WRENTHAM								3		3
BOYLSTON						2				2
BYFIELD							2			2
COVENTRY								2		2
DANVILLE NH	2									2
EAST BRIDGEWATER								2		2
EAST KINGSTON NH							2			2
GEORGETOWN							2			2
GOFFSTOWN NH							2			2
HOLBROOK								2		2
HOLDEN						2				2
HULL								2		2
KINGSTON NH							2			2
NEWMARKET NH	2									2
NEWTON HIGHLANDS								2		2
NORTH EASTON								2		2
OXFORD								2		2
PRINCETON						2				2
PROVIDENCE RI								2		2
REHOBOTH								2		2
RIVERSIDE RI								2		2
SALISBURY	2									2
SCITUATE								2		2
SOMERSET								2		2
SOUTH EASTON								2		2
TEMPLE NH	2									2
WENHAM							2			2
WEYMOUTH								2		2
WOONSOCKET RI								2		2
ABINGTON								1		1
ASHFIELD								1		1
AUBURN NH	1									1
AVON								1		1
BERLIN								1		1
BLACKSTONE								1		1
CHILMARK								1		1
CONCORD NH	1									1
CONWAY NH	1									1
CUMBERLAND RI								1		1
DEERFIELD NH	1									1
DERRY							1			1
DOVER							1			1
DUNBARTON NH	1									1
EAST GREENWICH								1		1

EAST TAUNTON								1		1
EASTHAM								1		1
EASTON								1		1
EDGARTOWN								1		1
FALL RIVER								1		1
FALMOUTH								1		1
FREMONT NH							1			1
GILBERTVILLE						1				1
GOFFSTOWN							1			1
GRAFTON								1		1
GREENVILLE							1			1
GREENVILLE NH							1			1
HAMILTON							1			1
HINGHAM								1		1
HOLLIS	1									1
HOLYOKE								1		1
HOPEDALE								1		1
HYDE PARK					1					1
INTERVALE NH	1									1
JOHNSTON RI								1		1
KINGSTON RI								1		1
LAKEVILLE								1		1
LEICESTER								1		1
LITCHFIELD							1			1
MANCHESTER							1			1
MARION								1		1
MEDWAY								1		1
MERRIMACK	1									1
MIDDLEBORO								1		1
MIDDLETOWN								1		1
MINOT								1		1
MONSON								1		1
NEW HAMPTON NH							1			1
NEWMARKET	1									1
NEWTON LOWER FALLS								1		1
NORTH DIGHTON								1		1
NORTH KINGSTOWN								1		1
NORTH UXBRIDGE								1		1
NORTH WOOD NH	1									1
NOTTINGHAM NH	1									1
Onset								1		1
PAWTUCKET RI								1		1
PELHAM	1									1
PEMBROKE								1		1
PETERBOROUGH NH	1									1
PORTSMOUTH RI								1		1
PRIDES CROSSING							1			1
RAYNHAM								1		1
ROCHESTER NH	1									1

RUTLAND						1				1
SANDWICH								1		1
SAUNDERSTOWN RI								1		1
SEEKONK								1		1
SHERBORN								1		1
SOUTH GRAFTON								1		1
SOUTHBRIDGE								1		1
SUTTON								1		1
THREE RIVERS								1		1
TILTON NH							1			1
TOPSFIELD							1			1
WARWICK RI								1		1
WEST BOXFORD							1			1
WEST BRIDGEWATER								1		1
WEST BROOKFIELD								1		1
WEST FALMOUTH								1		1
WILBRAHAM								1		1
WINCHENDON SPRINGS						1				1
WINCHESTER NH	1									1
WINTHROP					1					1
WOLFEBORO NH	1									1
WOODS HOLE								1		1
WOODVILLE								1		1
YARMOUTH								1		1
YORK ME							1			1

Employer Survey Results – Response to TDM Question by Employer

Company provides the following TDM measures.

Companies

TDM Measures	MITRE	CIS-US,Inc.	H&F Aviation	MEDICA	Renaissance	Diversified Technologies	Radex	Vedas	Amptek	Ramada	GCC Tech
Carpool Matching	Y										
Transit Subsidies											
On-site MBTA pass sales	Y										
Shuttle from transit											
Staggered Work Hours			Y		Y		Y				
Shuttles to off-site parking											
Emergency Ride Home Program	Y				Y						
Designated carpool spaces	Y										
On-site transit information	Y				Y					Y	
Telework (work at home)	Y		Y		Y						Y
CommuterCheck Program											
Bicycle racks	Y				Y	Y					Y
Showers	Y		Y		Y						Y
Flextime	Y				Y	Y	Y				Y
None of the above		Y		Y				Y	Y		

Likelyhood of providing incentives.

Incentives	MITRE	CIS-US,Inc.	H&F Aviation	MEDICA	Renaissance	Diversified Technologies	Radex	Vedas	Amptek	Ramada	GCC Tech
Emergency Ride Home Program	VL	NL	SL	NL		NL	NL	NL	NL	NL	NL
On-site transit information	VL	NL	NL	SL		NL	SL	SL	NL	VL	NL
Shuttle to train/bus station	NL	NL	NL	NL		NL	NL	SL	NL	NL	NL
Subsidy of transit/vanpool fares	NL	NL	NL	NL		NL	NL	NL	NL	NL	NL
On-site sale of transit passes	VL	NL	NL	NL		NL	NL		NL	NL	NL
Designated carpool spaces	VL	NL	SL	NL		NL	NL	SL	NL	NL	NL
Help with matching carpools	VL	NL	NL	SL		NL	NL	SL	SL	NL	NL
Bicycle storage made available	VL	NL	SL	NL		VL	NL	NL	NL	NL	VL
Showers and lockers made available	VL	VL	VL	SL		NL	NL	NL	NL	NL	VL
Alternative work schedule	VL	NL	VL	NL		NL	VL	NL	NL	NL	SL
Join a TMA	SL	NL	NL	NL		NL	NL	NL	NL	NL	SL

Very Likely (for the most part companies already provide this) = VL
Somewhat Likely = SL
Not Likely = NL

Company provides the following TDM measures.

Companies

TDM Measures	Hologic	Discovery Labware	Transwitch	e-traction	J. Sansone	FUJIFILM	Instinet	Cambridge Heart	Carlton Willard	MCC	Reference Diagnostics	F
Carpool Matching										Y		
Transit Subsidies												
On-site MBTA pass sales												
Shuttle from transit										Y		
Staggered Work Hours	Y	Y										
Shuttles to off-site parking												
Emergency Ride Home Program			Y									
Designated carpool spaces										Y		
On-site transit information										Y		
Telework (work at home)		Y		Y								
CommuterCheck Program												
Bicycle racks	Y								Y	Y		
Showers	Y	Y		Y		Y	Y	Y		Y		
Flextime	Y	Y		Y				Y				
None of the above					Y						Y	

Likelyhood of providing incentives.

Incentives	Hologic	Discovery Labware	Transwitch	e-traction	J. Sansone	FUJIFILM	Instinet	Cambridge Heart	Carlton Willard	MCC	Reference Diagnostics	F
Emergency Ride Home Program	SL	NL		NL	VL	SL	NL	NL		NL	NL	
On-site transit information	SL	VL		NL	NL	SL	NL	NL		VL	SL	
Shuttle to train/bus station		NL		NL	NL	NL	NL	NL		VL	NL	
Subsidy of transit/vanpool fares	NL	NL		NL	NL	SL	NL	NL			NL	
On-site sale of transit passes	NL	SL		NL	NL	SL	NL	NL			NL	
Designated carpool spaces	NL	NL		NL	NL	SL	NL	NL		VL		
Help with matching carpools	SL	SL		NL	NL	VL	NL	SL		VL	NL	
Bicycle storage made available	VL	VL		NL	NL	SL	NL	SL		VL		
Showers and lockers made available	VL	VL		VL	NL	VL	VL	VL		VL		
Alternative work schedule	VL	VL		VL	NL	NL	SL	SL			NL	
Join a TMA	NL	SL		NL	NL	SL	NL	NL		SL	NL	